S. HRG. 108–1031

PASSENGER AND FREIGHT RAIL SECURITY

HEARING

BEFORE THE

COMMITTEE ON COMMERCE, SCIENCE, AND TRANSPORTATION UNITED STATES SENATE

ONE HUNDRED EIGHTH CONGRESS

SECOND SESSION

MARCH 23, 2004

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ONE HUNDRED EIGHTH CONGRESS

SECOND SESSION

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PASSENGER AND FREIGHT RAIL SECURITY

TUESDAY, MARCH 23, 2004

U.S. SENATE,
COMMITTEE ON COMMERCE, SCIENCE, AND TRANSPORTATION,
Washington, DC.

The Committee met, pursuant to notice, at 10:04 a.m. in room SR–253, Russell Senate Office Building, Hon. John McCain, Chairman, presiding.

OPENING STATEMENT OF HON. JOHN MCCAIN, U.S. SENATOR FROM ARIZONA

The CHAIRMAN. Good morning. The Committee meets today to consider the state of rail security in the United States. Obviously, the recent attacks on Madrid's commuter rail system have demonstrated all too vividly that our own transit system, Amtrak and the freight railroads, could be vulnerable—and I emphasize, could—be vulnerable to terrorist attacks. The attacks in Spain were carried out with horrifying precision and apparent ease, killing 191 and injuring more than 1,400.

Only modest resources have been dedicated to maritime and land security over the past two and a half years compared to the investments made to secure the airways. That is a fact. The good news is that the Federal Transit Administration, FTA, individual commuter agencies, Amtrak, and the freight railroads have on their own initiative taken steps to safeguard passengers, facilities, and cargo. These efforts, accomplished at a very small cost to the Federal Government, have helped make our rail system safer.

But rail security efforts remain fragmented. The Department of Homeland Security has still not signed memorandums of agreement with the Department of Transportation, as recommended by the General Accounting Office, to make clear each Department's roles and responsibilities with respect to rail security.

Further, the Transportation Security Administration's Maritime and Land Security Division has yet to complete a threat and vulnerability assessment for the rail system and prepare an integrated security plan that reflects the unique characteristics of passenger and rail and freight rail operations. The Maritime and Land Division is pursuing a number of individual projects, but does not appear to have an overall strategy for improving rail security.

We are fortunate that we are not in the position today of having to make decisions about rail security in the wake of a terrorist attack here at home. The efforts of the freight railroads, DHS, FTA, and the FRA can help Congress and the administration target additional resources that may be needed effectively. With our Nation

facing a half trillion dollar deficit, we must use the taxpayers' money wisely.

Shortly after the terrorist attacks on September 11, the Commerce Committee reports rail security legislation co-sponsored by myself and Senator Hollings. That proposal was aimed primarily at Amtrak and included a number of projects that were part of Amtrak's original request that even Amtrak has since discredited. Unfortunately, the full Senate has not acted on rail security legislation.

I hope that following this hearing the Committee can develop a bipartisan bill to address rail security needs and the fire and life safety work in the Penn Station tunnels.

I want to welcome our witnesses. I look forward to their statements and hearing their recommendations about how best to improve our Nation's rail security.

[The prepared statement of Senator McCain follows:]

PREPARED STATEMENT OF HON. JOHN MCCAIN, U.S. SENATOR FROM ARIZONA

The Committee meets today to consider the state of rail security in the United States. The recent attacks on Madrid's commuter rail system demonstrated all too vividly that our own transit system, Amtrak, and the freight railroads could be vulnerable to terrorist attack. The attacks in Spain were carried out with horrifying precision and apparent ease, killing 191 and injuring more than 1,400.

Only modest resources have been dedicated to maritime and land security over the past two and one-half years compared to the investments made to secure the airways. The good news is that the Federal Transit Administration (FTA), individual commuter agencies, Amtrak, and the freight railroads have, on their own initiative, taken steps to safeguard passengers, facilities, and cargo. These efforts, accomplished at a very small cost to the Federal Government, have helped make our rail system safer.

But rail security efforts remain fragmented. The Department of Homeland Security (DHS) has still not signed memorandums of agreement (M–0-As) with the Department of Transportation (DOT) as recommended by the General Accounting Office (GAO) to make clear each department's roles and responsibilities with respect to rail security. Further, the Transportation Security Administration's Maritime and Land Security Division has yet to complete a threat and vulnerability assessment for the rail system and prepare an integrated security plan that reflects the unique characteristics of passenger and freight rail operations. The Maritime and Land Division is pursuing a number of individual projects, but does not appear to have an overall strategy for improving rail security.

We are fortunate that we are not in the position today of having to make decisions about rail security in the wake of a terrorist attack here at home. The efforts of the freight railroads, DHS, FTA, and FRA can help Congress and the Administration target additional resources that may be needed effectively. With our Nation facing a half trillion dollar deficit, we must use the taxpayers' money wisely.

Shortly after the terrorist attacks on September 11, 2001, the Commerce Committee reported rail security legislation co-sponsored by myself and Senator Hollings. That proposal was aimed primarily at Amtrak and included a number of projects that were part of Amtrak's original request that even Amtrak has since discredited. Unfortunately, the full Senate has not acted on rail security legislation. I hope that following this hearing, the Committee can develop a bi-partisan bill to address rail security needs and the fire and life-safety work in the Penn Station tunnels.

I want to welcome our witnesses. I look forward to their statements and hearing their recommendations about how best to improve our Nation's rail security.

The CHAIRMAN. Senator Breaux.

STATEMENT OF HON. JOHN B. BREAUX, U.S. SENATOR FROM LOUISIANA

Senator BREAUX. Thank you very much, Mr. Chairman.

I have a statement from Ranking Member Senator Hollings, that I would like to make part of the record. He could not be with us. He is attending a funeral service today for a good friend and former Governor and Ambassador and could not be with us. But his statement will be made part of the record if there is no objection.

The CHAIRMAN. Without objection.

[The prepared statement of Senator Hollings follows:]

PREPARED STATEMENT OF HON. ERNEST F. HOLLINGS,
U.S. SENATOR FROM SOUTH CAROLINA

The Commerce Committee has taken the lead on transportation security issues. We have authored legislation on aviation security and port security and had to push the Administration to implement the provisions of those laws. We are here today to push them once again, this time on rail security.

Two weeks ago, I re-introduced rail security legislation similar to S. 1501 passed unanimously by this Committee in October 2001. It is now 2004, and still we have not seen anything comprehensive done on rail security. Yesterday, the *Washington Post* highlighted the lack of commitment to rail security. (I will include a copy of the article for the record.)

Transportation security is a matter of national security. Terrorists have made public transportation a new theater of operations. Algerian extremists set off bombs in the subways of Paris in 1995 and 1996; a nerve gas attack on Tokyo's subways by members of the Aum Shinrikyo sect in 1995 killed 12 and injured over 5,000 people; in 1999 a bomb injured three people at a Sydney rail station; in 2000 bomb threats shut down London's underground; one bomb injured nine in Dusseldorf's Underground; another bomb killed nine and injured 60 on the Metro in Manila. Earlier this month, we saw the devastation in Madrid, where over 200 were killed and some 1,600 injured. Security of our rail system is no longer a function that we can leave to the private sector or Amtrak and public transit operators that can barely cover their operating costs.

As we have seen in Madrid, for the terrorists determined to kill indiscriminately, public transportation is an ideal target. Precisely because it is public and used by millions of people daily. Attacks on public transportation, the circulatory systems of urban environments, cause great disruption and alarm, which are the traditional goals of terrorism.

We have focused a lot of attention on aviation security concerns following 9/11, while this has been extremely important, it is important to address the security needs of all modes of transportation.

It has been reported that Undersecretary Hutchison told the House Homeland Security Committee last week "the attacks in Madrid were not a big shock or a wake up call." The terrorist attacks of September 11th were the wake up call, and now Madrid is an alarm clock that reminds us that we need to develop and protect ALL modes of transportation. Unfortunately it seems like the only way we can get the Department of Homeland Security to act on anything is for the Congress to pass legislation which mandates when and how the Administration should identify and begin to protect our vulnerabilities.

I look forward to hearing from the witnesses. I understand that there are a number of things that have been done by Amtrak and the private railroads. Additionally, the Federal Transit Administration is widely regarded as doing an admirable job on a shoestring budget working with public transit operators to conduct training and public awareness campaigns.

But at the end of the day, we created the Department of Homeland Security to improve the security of our country, that is their charge, it is not the function of the Federal Transit Administration's or Amtrak or the freight railroads. At a minimum, the Department of Homeland Security should have taken a comprehensive look at rail transportation system in this country, assessed the threats and risks and made recommendations for improvements. For over two years, such a threat assessment has been discussed, but we have nothing to show, no budget requests dedicated to rail security, insufficient staffing at the Department, and the agency has repeatedly ignored questions posed by this Committee.

We cannot continue to neglect transportation sectors that are so vital to our economy. Transportation security requires a balanced and competitive system of transportation alternatives. We cannot be overly reliant on any single mode of transportation, therefore we need to ensure that we have a balanced and secure system.

Senator BREAUX. Mr. Chairman, you correctly alluded to the situation with the Madrid accidents. We are clearly here today because once again the world has seen what happens when terrorists target a particular means of transportation that the general public, innocent civilians, utilize on a day to day basis. We have spent billions of dollars to upgrade our aviation security, and appropriately so, after the 9/11 attacks. We have pushed and had hearings in the field and here in Congress on port security and I think we are making progress on port security. Every day we see new innovative measures being taken to protect the ports.

Now once again we are here to push for something that is equally as important, if not more so, and that is the question of railroad security. The budgets for rail security and funding have clearly lagged far behind what we are spending in these other areas. As an example, this year $4.5 billion is budgeted for aviation security while only approximately $65 million has been set aside for the Nation's public transit operators, even though daily, about five times more people use the train system than take airplanes in this country.

The United States has literally thousands of miles of railroad and transit tracks, obviously these are very difficult to protect. We know this, but we also recognize that security is a multi-layered system, consisting of various types of intelligence and coordination among state, local, and federal officials, the rail and transit operators and a number of devices and techniques that are capable of reducing the risk and the damage of terrorist attacks.

Mr. Chairman, we have attempted to address the question of rail security. In October 2001, right after the 9/11 events, I had the opportunity to chair a hearing on rail security. Only about a month after the attacks by al-Qaeda. We responded, we thought, in a quick fashion by reporting out a bill that would have required at that time, the Department of Transportation to perform an assessment of the risks associated with passenger and freight rail systems, to prioritize recommendations for security improvements, and also to make grants to carry out some of those recommendations.

Now, two and a half years later, we have a Department of Homeland Security, but I still remain concerned about the lack of attention to the rail security system. Although now the Transportation Security Administration has been moved from the Department of Transportation to the Department of Homeland Security, as the Chairman said, we still do not have a comprehensive risk assessment identifying the rail security priorities and we have not been able to get a response from the Department of Homeland Security about the funding and the personnel that are going to be dedicated to rail security.

I will close by saying, Mr. Chairman, this is a gigantic task, to be able to protect every person that is engaged in transportation in this country 24 hours a day, 7 days a week. But I think that we have to understand, as we saw in Madrid, that our rail system is really a potential target in this country. We have done a great deal of work in these other areas. We now need to focus on rail security, and that is the purpose of this hearing.

[The prepared statement of Senator Breaux follows:]

PREPARED STATEMENT OF HON. JOHN B. BREAUX, U.S. SENATOR FROM LOUISIANA

Unfortunately we are here today because of the terrible tragedy in Madrid, which serves as a reminder of the vulnerabilities common to all of the world's rail transportation systems. We have spent billions of dollars to upgrade aviation security in the U.S. after the attacks of 9/11. We have pushed and pushed for port security, and it is finally beginning to get attention. It appears we are here today to push again, but now for rail security.

Budgets for rail security, and funding, clearly have lagged far behind our aviation programs, this year $4.5 billion is budgeted for aviation security, while only $65 million has been set aside for preparedness for the Nation's public transit operators, even though five times as many people take trains as planes every day.

The U.S. has hundreds of thousands of miles of railroad and transit tracks, which are difficult to protect. We know this, but we also recognize that security is a multilayered system, consisting of various types of intelligence, coordination among state, local and Federal officials and rail and transit operators, and a number of devices and techniques capable of reducing the risks and damage of terrorist attacks.

With the recent attack in Spain, it has become clearer that we must focus our resources and efforts on all aspects of transportation security. Amtrak, for example has spent millions of dollars on security post-9/11, but the ability of organizations like Amtrak or public transit providers to make the necessary investment to provide protection from a potential attack on our rails is a matter of national responsibility.

Let me be clear, we know that surface transportation cannot be protected in the way we protect commercial aviation. Trains and buses must remain readily accessible, convenient, and inexpensive. Passenger profiling, the elaborate deployment of metal detectors, explosive detection equipment, hand searches, and armed guards which are features of the landscape at airports, cannot be transferred easily to subway or train stations. The delays would be enormous and the costs prohibitive. Rail lines, like power lines and pipelines, are extremely difficult to protect.

This does not mean, however, that nothing can be done. Transportation operators and security officials in areas that have been subjected to terrorist attacks have developed some effective countermeasures. Although they cannot entirely prevent terrorist attacks—because no security system can stop terrorists from setting off bombs in public places—good security measures can make terrorist operations more difficult, increase terrorists' likelihood of being detected and identified, keep casualties and disruptions to a minimum, reduce panic, and reassure passengers in a crisis.

At issue today, is what has been done to address rail security? In October 2001, I chaired a hearing on rail security approximately one month after this country was attacked by al-Qaeda. We quickly reported out a bill that would have required at that time, the Department of Transportation to perform an assessment of risks associated with the passenger and freight rail systems, prioritize recommendations for security improvements, and make grants to carry out such prioritized recommendations. Two and a half years later, we have a Department of Homeland Security, but I remain concerned about the lack of attention on rail security. Although the Transportation Security Administration has moved form DOT to DHS, we still do not have a comprehensive risk assessment identifying rail security priorities, and we have not been able to get responses from the Department of Homeland Security about the funding and personnel dedicated to rail security. The Department of Transportation's modal agencies, the Federal Railroad Administration and Federal Transit Administration are not responsible for security nor are they provided the budgets to address this important issue.

About one-third of terrorist attacks around the world reportedly target transportation. A lot of attention has been focused on aviation, but other modes are just as vulnerable, and if we only focus our efforts at antiterrorism to aviation, we will set ourselves up for disaster in one of the other modes of transportation. Last year, Amtrak provided passenger service for more than 24 million riders and public transit provided 3.5 billion passenger rail trips. We want to support and encourage transit use, so the issue of security is critical.

Securing cargo from attack is also crucial. Efficient flow of intermodal cargo and bulk cargoes are vitally important to this nation, however, they also pose risks to our population. For instance, railroads in this Nation operate 120,000 miles of railroad tracks, many of them traversing, operating under, or over, large metropolitan centers. They carry every sort of commodity, including hazardous and explosive materials. In 1999, Class I railroads carried close to two million carloads of chemicals, and just over 500,000 carloads of petroleum and coke. A single train can carry over 120 carloads, and be over 1 mile in length. I remember, while attending law school at LSU, that the State of Louisiana evacuated the entire Baton Rouge area when

a chlorine ship sank. How prepared are we to deal with a railroad hazmat situation? Are we any better prepared than before September 11?

I do not bring these issues up lightly, nor do I want to infer that our system of rail transportation is not secure and safe. I have faith in our transportation system. However, we have to reevaluate our system of security, we cannot continue to ignore the new realities—we must improve now or subject ourselves to greater regrets later.

We need to explore what steps the government and the private sector have taken to prevent acts of terrorism, and to explore what further steps could be taken to protect the public. I look forward to hearing from our witnesses and hope that this hearing will help advance this issue.

The CHAIRMAN. Thank you very much, Senator Breaux, and thank you for mentioning Senator Hollings' abiding and long-standing interest and commitment to this issue. He is unable to be here because of the death of the former Governor of South Carolina. Thank you.

Senator Allen.

STATEMENT OF HON. GEORGE ALLEN,
U.S. SENATOR FROM VIRGINIA

Senator ALLEN. Thank you, Mr. Chairman.

As you stated, the recent attacks, the terrorist attacks in Madrid, Spain, logically make rail security the focus of the attention of this committee. The terrorist attacks indicate clearly a susceptibility of in this country our urban subway systems, our passenger rail, as well as our freight trains, and including our ports, to terrorist attack. The ports are diverse; so are our transportation systems. The ports in Virginia are different than the ports in New Orleans or in Long Beach.

What we need to do, Mr. Chairman, is assess where we are now. We need to adapt, we need to innovate, and we need to improve. With you as the Chairman, I know there is always action as well. This hearing I think will give us an outstanding opportunity to assess where we are, recognize the steps that need to be taken as we assess the vulnerability, and proceed with policies to improve the security.

The rail operations as far as freight rail, this hearing will I think be of some help in allowing us to recognize what much, many of the freight rail systems have already done at their own expense, not waiting for the Government to act, and they are to be commended. As we look at this, we have to figure out, as we did, and as I argued in the aviation area, is let us look at new technologies, let us see if there are ways of utilizing technologies so that we can effectuate these security measures in a way that is the least disruptive.

One of the great things, our two Senators here from Delaware know, is about passenger rail, is it is so much easier and pleasant to get onto a train and not have to lug your luggage in some other place. We do not want to have it so everyone is so clogged up and unnecessarily delayed. But the question is are there some technologies, sensors and so forth, that might could be utilized as far as whether it is our subway systems or America or passenger rail. Aggravating delays are not what our goal should be.

You get to this capital region here, Mr. Chairman, and that is a unique situation with the Washington Metropolitan Area Transit

Authority, which is essential for just not citizens, but also the operation of government and the many employees who are essential in so many functions of government. We need to make sure there is clear communication and that we are taking all reasonable necessary precautions.

In the freight rail industry, I think it is important that we both provide the necessary security regulations, but at the same time try to regulate practically, which is sometimes a difficult thing for the Federal Government to do. I believe the American public is much better served with a standard of security as opposed to a process that micromanages the industry or our ports.

That being said, Mr. Chairman, thank you for holding this hearing after the tragedy and the terrorist attacks in Madrid. I believe we have to recognize and assess our vulnerabilities and address the high-risk areas of passenger rail as well as freight rail infrastructure and do it in a common sense way. I look forward to asking some questions from some of our witnesses where they are talking about diverting some freight from certain areas, which actually could make it not only harm commerce but actually make it a more dangerous situation.

So again, Mr. Chairman, thank you for the hearing. I thank all our witnesses for appearing before us today to address this serious issue.

The CHAIRMAN. Thank you.

Senator Lautenberg.

STATEMENT OF HON. FRANK R. LAUTENBERG,
U.S. SENATOR FROM NEW JERSEY

Senator LAUTENBERG. Thanks, Mr. Chairman. Obviously, this hearing could not be more opportune in the wake of what recently took place in Spain.

We have made some significant progress in air travel security, but we do not see the same kind of commitment to our homeland's surface transportation systems, and I hope, Mr. Chairman, this hearing will steer us in the right direction.

In my home state of New Jersey, it is practically impossible to travel to work without using a bridge, a tunnel, a railroad, or a subway, and it is imperative that we do everything possible to increase the security of our surface transportation infrastructure and systems.

Mr. Chairman, I think we are seeing that wherever people gather, there is a potential target. But I do think that we have to approach the security problems piecemeal as we recognize the particular danger. Warfare has changed. I just came back from Iraq. Note that there no longer is a common type of warfare gun to gun, face to face. We have remote bombs, things that can be put someplace and triggered off by someone miles away from the scene. So it makes the problem particularly complicated.

The Administration's eleventh hour announcement to do something about rail security was very pleasing. But, it is a late effort, focused more on response to terrorist acts and not enough in my view focused on prevention of terrorism in America. There are many things that we can do to improve security in our rail system and they require money for security-related capital projects as well

as operations. The transit agencies identified $6 billion in security needs and, to my knowledge, to date the Administration has released only $35 million in grants. I am curious to hear from our witnesses about the status of the other $65 million that we appropriated to them specifically for this purpose.

Amtrak spends tens of millions of dollars every year on security and yet not one dollar in the President's 2005 budget is specified for securing our Nation's intercity passenger rail service, and the 25 million riders who take Amtrak each year. Rather, the Administration chooses to dodge the responsibility of Amtrak's funding, recommending only half of what Amtrak says it needs to operate the Nation's intercity rail system safely and efficiently.

Amtrak is not even eligible to apply for a grant under any Department of Homeland Security grant program. The fact of the matter is, the Administration needs to do much more to improve the security of our surface transportation systems by preventing terrorism up front, not operating solely in the reaction mode.

The decisions we make now could very well come back to plague us. An ounce of prevention may save many American lives. No equation can tell us where we ought to be or what to do. We know that we need to get busy on this and we should not be looking for cheap security. That has been the theme of my campaign to keep the FAA intact, it is a very significant part of the security system of aviation.

We decided to take the baggage screeners away from the private sector and put the 28,000 of them into the Government sector. The costs of operating have gone up significantly. But don't all of us feel better about it? I do.

So, Mr. Chairman, I once again thank you for holding this hearing and I look forward to hearing from our witnesses.

The CHAIRMAN. Thank you, sir.

Senator Boxer.

STATEMENT OF HON. BARBARA BOXER,
U.S. SENATOR FROM CALIFORNIA

Senator BOXER. Thank you so much, Mr. Chairman. By the way, thank you for your testimony at the Foreign Relations Committee. I thought it was very important.

I want to welcome our colleagues today. I have worked with them on this issue particularly Senator Biden. He and I have served here for a long time. One of the things people think about when they think about "Amtrak" is the East Coast. I am here to tell you we are very busy; there are a lot of Amtrak passengers in California, and I will get into that. So this is a key issue from East to West.

Mr. Chairman, with your guidance, we passed an excellent bill right after 9/11. It is unfortunate that it did not become the law of the land. It dealt with many of the improvements that we need to make to our rail system.

We learned from the aviation attack that if you are not ready, the results can be devastating. We have been working to improve aviation security. Senator Lautenberg discussed that. But, we can and should do more. We have begun to improve port security, but we must do more. I look forward to working with all of you on these issues.

Clearly, after Madrid we have to address the vulnerability of our rail systems. We needed to before Madrid, now it has been brought home to us in stark pictures.

I was disturbed to read a quote from the Department of Homeland Security Under Secretary for Border and Transportation Security. He said, quote: "It is very important that we do not simply react to an incident that happens anywhere in the world," unquote, and that the administration was not seeking more funding for train security.

And he further said, and this I found really shocking: "An aircraft"—and this is a direct quote: "An aircraft can be used as a weapon. A train cannot be hurled through the air in the same fashion," unquote.

Obviously, we now see the tragedy that can come from attacks on rail. Let me show you a picture. Let us show the network of passenger lines here. All these represent different lines. Now let us show the freight lines. There are many targets of opportunity here! Look at this. This is our U.S. freight rail network.

We need to take steps. I personally think the bill that came out of this Committee is a good first step. I would like to see us do that again. I have taken a small portion of and immediate funds for police for K–9 patrols and put it into a bill. I have also asked the GAO to take a look at what the Department is doing.

But again, as Senator Breaux pointed out, it is hard to obtain information from Homeland Security. Secretary Ridge claims the new initiatives he is going to implement will not require new funding. He thinks they can absorb the costs. I am surprised to hear that because they were running a tight ship prior to the events in Madrid. I am not one who believes you throw money at a problem. I am one who believes you take steps, and if you do it on the cheap, we will pay the price eventually.

I will put the rest of my statement in the record. California has the second highest Amtrak ridership in the country. This means a lot to us, and I thank you very much for holding this hearing.

The CHAIRMAN. Thank you.

Senator Snowe.

STATEMENT OF HON. OLYMPIA J. SNOWE, U.S. SENATOR FROM MAINE

Senator SNOWE. Thank you, Mr. Chairman, and thank you for holding this hearing today. Obviously it is very timely, very appropriate, in the aftermath of the tragic events in Madrid.

Also, Mr. Chairman, I do think it is appropriate for us to be conducting oversight on the issue of rail security because of, I think frankly, the lack of a coordinated rail security plan. I think many of the questions that need to be raised here today obviously, some of them have already been raised by those who have spoken previously, but the lack of funding for rail security.

We provide .8 percent of that that is invested in aviation security. We spend—certainly we have addressed this in the Committee since 9/11. More than $515 million worth of grants have been authorized by this Committee, but, regrettably, it has not passed Congress.

So one is that we obviously have to have a plan on rail security. Second, I think, Mr. Chairman, we can take measures now that I think that would be very appropriate to protect the public, for example to have a greater police presence on trains and platforms, bomb-sniffing K–9 units. We could have the requirement of identification for passengers. Only a quarter of all passengers now show any kind of identification.

I have also introduced legislation that would require a pilot initiative to examine X-ray explosive device techniques, also technology for examining passenger baggage as well on passenger trains. And I understand as a result of a report yesterday that the Department of Homeland Security will speed up plans for such a pilot program to test whether or not these explosive detection technologies can be used to screen rail passengers and bags, and that the technology will be tested at a commuter rail station.

So I think we need to know exactly when this pilot program will be up and running, where it will take place, what kinds of technology will be used.

In addition, Mr. Chairman, we also, as you mentioned, referred to the lack of coordination between TSA and the Department of Homeland Security. Again, I think that that is an issue that we also need to follow up on. When Congress created the TSA, it charged the agency—and I am quoting from the statute—"responsibility for security on all modes of transportation." TSA does have a grant program for port security, but it does not have a grant program for rail security.

So I think that obviously we have to address that. Now, I understand TSA is in the process of developing an intermodal transportation security plan and also a rail-specific security plan. I think the question is where is that in this process, has it been completed, have we done a vulnerability assessment of both rail and freight systems as well? That should be done, Mr. Chairman. We should have a plan. In fact, it has been indicated, the General Accounting Office indicated last spring, that the Secretary of Homeland Security should work with the Secretary of Transportation to develop a risk-based plan to specifically address rail security, which should establish timeframes for actions to protect hazardous materials rail shipments.

The question is whether or not that is being undertaken currently, what is being done, when will it be completed, so that we can move forthwith on a comprehensive, coordinated, and effective plan to implement rail security. I think that is certainly something this country deserves and all those who use the systems, both on the freight side as well as on the passenger side.

Thank you, Mr. Chairman.

[The prepared statement of Senator Snowe follows:]

PREPARED STATEMENT OF HON. OLYMPIA J, SNOWE, U.S. SENATOR FROM MAINE

Thank you, Mr. Chairman, for holding a hearing on this Committee's oversight of passenger and freight security. And I want to thank Under Secretary Hutchinson and our other witnesses for coming to discuss issues that have taken on a great deal of urgency since the recent attacks in Madrid.

Since the terrorist atrocities here in America two-and-a-half years ago, I have strongly believed that a critical component in our fight against terrorism is protecting the security of the length and breadth of our transportation system, includ-

ing our rail system. As Madrid tragically reminded us, we must assume that every facet of our transportation system is and remains a target for violence.

Securing our passenger rail system against terrorism is a tremendous challenge, an entirely different challenge than securing our aviation system. Some 10 million train and subway trips are taken every day in America, of which Amtrak carries 66,000 of those passengers -two-thirds of them through the Northeast Corridor. The Washington Metro system alone moves 600,000 people daily. The key question we must answer at today's hearing is what—if anything—can we do to prevent Madrid-style attacks from occurring on a system so extensive, so open and carrying so many people, and what has been accomplished in this country since 9/11.

What we do know is that—compared to other transportation modes—federal investment in rail security programs since 9/11 has been virtually nonexistent. While about $4 billion is being spent this year to shore up aviation security, a grand total of $50 million was appropriated in domestic-preparedness grants for local transit and rail agencies during FY 2004. Several times since 2001, this Committee, with my support, has approved legislation authorizing DHS to make $515 million in grants to upgrade security across the entire railroad system. Given the carnage we saw in Madrid earlier this month, it is clear that the amount of money we are spending on rail security -just 0.8 percent of that invested in aviation security in FY 2004—is not enough to protect against this kind of an attack.

While it's generally agreed that the cost and inconvenience of airport style screening of every train passenger would outweigh the benefits, there are several quick, relatively cheap measures that Amtrak, transit and commuter rail agencies can take to protect against such an attack that we must implement as soon as possible. These include increased police presence on trains and platforms; sweeps with bomb-sniffing K–9 units; removal of large fixtures that can hide a bomb, like trash cans and vending machines; and requiring picture ID with ticket purchase before boarding trains. I will be asking our witnesses what DHS and other agencies are doing to help rail authorities implement these security measures.

At the same time we are underinvesting in rail security, we know that al-Qaeda and its allies are interested in striking the U.S. rail network. In late January, the Federal Bureau of Investigation (FBI) issued a bulletin to local law enforcement warning that terrorists remained interested in striking U.S. rail lines, which could result in a "substantial loss of life." As if that weren't enough, this threat was underscored by Iyman Faris, the Ohio truck driver who pleaded guilty last May to providing material support to al-Qaeda, told investigators that the organization wanted to derail a train near Washington. So even if the recent Madrid bombings had not occurred, this issue would still be a vital one for Congress and the country, and I look forward to hearing how quickly the Homeland Security Department's threat and vulnerability assessments with regard to our rail system are moving.

I have long been interested in what we can do to secure our rail system. In November 2001 and again in September 2003, I introduced two bills in an effort to help us ascend the steep learning curve on transportation security we as a country faced in the wake of the September 11 terrorist attacks; one that would require the General Accounting Office (GAO) to study security innovations and measures on foreign rail systems, with an eye toward applying them in the United States; and the second that would create a new pilot initiative to screen passengers and carry-on baggage on the Amtrak passenger rail system.

These provisions have since been incorporated into several broader rail bills—the latest being Senator Hollings' Rail Transportation Security Act introduced just after the Madrid attacks—but have yet to be enacted. I am pleased that, with regard to the foreign rail security study, GAO met with my staff recently and is in the initial stages of a study, which I requested along with Representatives Castle and Quinn. As GAO begins its work, I suspect that our friends in Europe, Asia, and other regions, may be able to provide valuable insight on how we can improve our rail transportation security, and I look forward to hearing any initial observations GAO might have today.

The bottom line is that confronting the multitude of transportation security challenges in this country requires a "must-do" attitude. We can't let ourselves off the hook with excuses about what "can't be done." We can't afford to take any chances, and we can't afford to assume that time is on our side.

I look forward to hearing how our witnesses intend to carry out his critical piece of the homeland security puzzle—securing our Nation's passenger and freight rail systems. Thank you, Mr. Chairman.

The CHAIRMAN. Thank you.

Senator Dorgan.

STATEMENT OF HON. BYRON L. DORGAN,
U.S. SENATOR FROM NORTH DAKOTA

Senator DORGAN. Mr. Chairman, I know you want to get to the witnesses, and I was thinking the two Senators from Delaware are probably the only Members of Congress who are million milers on the rail.

I will make two points. One, we have dramatically improved aviation security. But we are lacking with respect to trains and subways. 14 million people a day ride trains and subways. I think this hearing is a very important inquiry into what we are doing and how we can improve. The surface transportation systems with respect to security have fallen behind aviation security. That is what this hearing is about.

I would like to mention one more point. In addition to security dealing with terrorism, we have other issues. As you know, in Minot, North Dakota, 2 years ago there was a train derailment and anhydrous ammonia cars went off the track. That City of nearly 50,000 people was enveloped in deadly anhydrous ammonia gas at 2 o'clock in the morning. One died, many were injured, many went to the hospital. It could have been a real catastrophe. It fortunately was short of that.

I wanted to mention that the NTSB report took a little over 2 years. It should not have taken that long, but it was released within the last 2 weeks. I will read one paragraph and then I will be done. It says: "The tank cars were pre-1989 non-normalized steel tank cars. They have a lower fracture toughness than normalized steel cars made after 1989. 60 percent of the pressure tank cars currently in service were built before then and were likely constructed from non-normalized steel."

So here is what they say: "The NTSB is concerned about the continued transportation of Class 2 hazardous materials in the pre-1989 tank cars." They believe that using these cars to transport Class 2 hazardous materials under current conditions poses an unqualified but real risk to the public.

I raise only to say that this is a security issue for the American people and we need to consider the context of this.

Again, Mr. Chairman, thank you for holding this hearing. I think it is very timely.

The CHAIRMAN. Thank you very much.

I would like to welcome our two colleagues from Delaware, Senators Biden and Carper. I would like to tell them that it will be the intention of the Committee to mark up another bill before we go into recess and have it ready for floor consideration. This time, given the gravity of the situation, we would have to, if it is not brought up as a stand-alone bill, we would have to consider it as an amendment. I look forward to working with the two Senators from Delaware on this very important legislation.

We usually take the oldest and the ugliest first, Senator Biden, so we will take you.

[Laughter.]

STATEMENT OF HON. JOSEPH BIDEN, U.S. SENATOR FROM DELAWARE

Senator BIDEN. I appreciate that. Thank you very much, Mr. Chairman, and I promise that I will not say anything nice about you today to have Rush Limbaugh get all excited again.

[Laughter.]

Mr. Chairman, let me begin—I am going to break my pledge already. Let me begin by thanking you, no malarkey. You made a commitment when I was on the floor hollering immediately after we appropriated $15 billion to bail out the airlines without a lot of discussion in 4 days. I was on the floor and I was excited, which is not a surprise. It is something you and I occasionally have in common.

You made a commitment. You are the only one that made it and you are the only one in the entire outfit to keep it. You said: Joe, do not add this to airlines, do not come up with your rail security bill; I promise you I will hold a hearing and report out an authorization immediately when we get back. And you did it.

I agree with Senator Boxer. I think the 1.35 you voted out, we should vote out right away, flat up. But I understand that there is another bill that Senator Carper and I, led by Hollings, have introduced, and maybe there is another way you want to go. I will leave it to your judgment because I trust you.

I want to remind everybody what happened the last time. You did your job. You went to the floor and fought for it. We could not get it cleared for discussion or debate on anything for over a year and a half. We could not clear it to get it on the floor.

I hope that what has happened now is that we are beyond that. I hope we are beyond that.

Let me ask unanimous consent that my statement be put in the record and summarized.

The CHAIRMAN. Without objection.

[The prepared statement of Senator Biden follows:]

PREPARED STATEMENT OF HON. JOSEPH BIDEN, U.S. SENATOR FROM DELAWARE

Thank you, Mr. Chairman, for the opportunity to speak here this morning before your committee.

The security of our Nation's rail system, and especially our passenger rail system, is on everyone's mind in the wake of the horrific events in Madrid.

As you listen to testimony here today, I urge you and the members of this committee—we cannot wait. We cannot let the perfect be the enemy of the good.

There is much we can learn about how to secure the very open rail system in this country.

But we do know a lot about the basics of physical security, the things we can do right away to make that system safer.

More dogs to sniff for explosives. More police officers, better lighting, closed-circuit television surveillance, fencing—nothing fancy or experimental, just resources to do what we already know can work.

That is one thing we can do throughout the system to make our citizens safer.

But the other top priority, Mr. Chairman, has to be securing the most vulnerable and most valuable targets.

We know that the targets with the highest payoff for terrorists are the ones that have the greatest potential for both catastrophic levels of casualties and stunning symbolic effect.

And the six tunnels under New York City, heading into Penn Station, are just that kind of target. The newest was built in 1910, long before the kinds of threats we are discussing today could even be imagined.

And such a target is the tunnel that runs right here under Capitol Hill—under the Senate Offices, the Supreme Court of the United States, and the House Office Buildings.

It wouldn't take a high-tech explosive, it wouldn't take a dirty bomb, to do the kind of massive damage that terrorists want.

It would just take a small explosion on a freight train carrying some everyday hazardous cargo such as chlorine, and another date would join December 7 and September 11 in infamy.

So let's do what we know needs to be done to make those tunnels secure. We knew this years ago. To wait another day would be wrong.

We have talked about this issue long enough.

You and I started down this path over two years ago, in a late night session on the Senate floor debating fifteen billion dollars of assistance to the airline industry in the immediate aftermath of 9/11.

Twelve billion for financial assistance, three billion for security needs.

I came to the floor with Senator Carper and others, and we had an amendment to that legislation, an amendment that would have given Amtrak the money to begin the process of securing the system—from the tunnels on the Northeast Corridor to stations and yards around the Nation.

You asked me to withhold that night, Mr. Chairman, not to delay passage of that important legislation. And I did.

You gave me your word that you would report a bill out of this committee as soon as possible. And you did.

But that was over two years ago. I don't think either one of us thought we would be here, at this point, still talking about rail security, with virtually nothing done about it.

For all of the last Congress that bill, which simply authorized $1.3 billion for Amtrak security upgrades, was blocked here in the senate. Someone on your side of the aisle had a hold on that bill, Mr. Chairman, a secret hold, that blocked passage of a bill that simply authorized funds for Amtrak security.

We know that passenger rail has been identified as a potential target. The FBI told us that last year.

We have seen the devastation that can be wrought when passenger rail is hit.

On any given day, Mr. Chairman the number of people moving in and out of Penn Station in New York is the equivalent of over a thousand Boeing 767's—if they were in airplanes instead of trains, they would be protected by a new security system.

But the Congress has failed, utterly failed, in its responsibility to make passenger rail more secure.

And the Administration, and the Department of Homeland Security, have stood quietly by, asking for no resources to protect passenger rail, taking no action.

I thank you for the opportunity to speak here today, Mr. Chairman, and I thank you for this hearing. But I must say that I hope this is the last time we sit down to talk about rail security before we take action.

We ought to have a passenger rail security bill rushed out the doors of Congress and onto the President's desk, just the way we did for the airlines.

That it took another tragedy to move us to action is a sad commentary, Mr. Chairman.

I am writing today to Majority Leader Frist, and asking him to make rail security legislation the top priority for the Senate floor when it comes out of this committee.

We may not know everything there is to do, Mr. Chairman, but we know how to get started.

I know we can count on you to get legislation moving so we can make our rail system more secure.

Thank you, Mr. Chairman.

Senator BIDEN. Mr. Chairman, you and I both know, because we have spent a lot of time on this issue, there is no easy answer to this one. It is not like sealing the cockpit doors or putting security folks, at a check-in points. Let us set goals and think about how al-Qaeda and the international terrorist organizations function.

The reason they picked the Trade Towers and not a 20-story building in downtown Wilmington, Delaware, is because symbolically and practically, with non-lethal technology, they could render us apparently helpless at the moment and kill thousands upon

thousands of people. That is the modus operandi, that is the M.O. of these guys.

There is something we can do immediately, that would have the benefit of putting people to work. We can redo the tunnels. Now, my friend from North Dakota pointed out what happened when ammonium chloride, derailed in the wide-open prairie near a town of 50,000 people. The same exact thing happened in the Baltimore tunnel, built in 1869. Remember, my friend from Virginia, 18 months ago there was a fire in that tunnel and it shut down all of Baltimore. The entire Inner Harbor shut down.

That tunnel is solid granite, no escape, no ventilation, no lighting, no switching, no security. As we speak today, in Frank Lautenberg's area 357,000 people are going to be underground in New York City in six tunnels, the most recent of which was built in 1910.

There are tragedies and there are tragedies. Can we stop a Madrid occurrence somewhere between here and California over the road? Probably not with certainty. But can we stop an explosion of incredible consequence underneath the Supreme Court of the United States as we speak today?

Where do you think these guys are going? If you have a tunnel that was built in 1904 it needs to be inspected. Tom and I went out to the Philadelphia Airport. It turned out that the guy running the security outfit there was a convicted felon. He also hired 37 felons who were checking people going through security. We went up and witnessed this.

Literally, ask them to take you through the tunnel on a walk-through. What do you think would be the consequence of an explosion in that tunnel? It would blow up the Supreme Court of the United States of America or a House office building. Why do we think they would only send a plane into the Capitol?

The point is this. New technologies matter and there are a lot of things we can and should be looking at. But certain things are just rock simple. We should fix the tunnels now, number one. You voted that out once already.

Number two, in terms of commerce, I am less concerned about affecting commerce overall on the margins than I am about security. We shut down Reagan Airport. We do not let private planes fly into Reagan Airport any more.

Senator ALLEN. I do not agree with that.

Senator BIDEN. Well, you may not agree with that. I agree with that. It is above my pay grade to know whether that is necessary. But I want to tell you something. It will make sense.

What happened when the Valdez went down? We said we need double hulls on tankers. Why do we not require that on new construction tankers, why do we not require greater safety? There are basic things that we have to do. I will end with this. Mr. Chairman, there are basic, simple things like Senator Snowe talked about: station dogs on the highest commuter rail systems, just walking up and down and sniffing. It is a deterrent and it may work.

But the idea that we are going to stop everything, I hope I do not hear on the floor. I hope I do not hear anyone on the floor arguing with me when I am, or others are saying that we need to do

something. You cannot guarantee rail security. But you can guarantee that a catastrophe of the proportions along the lines of 9/11 does not happen if we are smart.

I know you know this and I know you believe it. The agency has told us for 2 years that rail is a target. Please, do what you did before, let all of us go to the floor and say: Act now.

The CHAIRMAN. Thank you very much, Senator Biden. I want to assure you again we will mark up a bill and have it ready, with your and Senator Carper's input, and do everything we can to give it the priority.

Senator BIDEN. I trust your judgment, Mr. Chairman. There is no right answer.

The CHAIRMAN. I am somewhat confident that the Administration recognizes the need for this as well. We may have some differences. I hope we can work them out.

Senator Biden, I know you have other responsibilities and you cannot stay. We appreciate always your enlightening and entertaining testimony.

Senator BIDEN. Well, I know you love saying that, John. I find you entertaining on the floor too when you explode. But I want to stay for my younger, better looking colleague and hear what he has to say. I may learn something, and then I will leave. But thank you.

The CHAIRMAN. Thank you, sir.

Senator Carper, welcome. Thank you for your, and along with Senator Biden, deep involvement in this issue.

STATEMENT OF HON. THOMAS R. CARPER,
U.S. SENATOR FROM DELAWARE

Senator CARPER. Thanks, Mr. Chairman. We appreciate your championing this cause and holding this hearing. And to each of our colleagues who are here and particularly those of you who have spoken, we are grateful.

Senator Biden alluded to a tunnel in Baltimore that was shut down last year because of a fire. He and I came through that tunnel today on a train to Washington, as we do many mornings, and we will go back home through that tunnel tonight. Today the number of people who will be using trains to travel from Washington to New York exceeds significantly the number of people who will be traveling by airplane between Washington and New York.

Yesterday I did something I do not often do. I took the train and went the other way from Delaware and I went to New York. I could not believe the tumult of people coming in and out of Penn Station as I prepared to catch the 5 o'clock train to head for home. I am told that there are more people that are in and out of Penn Station to take the subways and the trains at any given time than in all three airports combined in New York City.

I share those numbers and those thoughts with you today. This is a real concern. It is a concern to us because we ride the train a lot and we have a lot of our constituents who do. But in Delaware, in the Northeast Corridor, and in other places where train passenger service is growing, particularly California, the West Coast, it is a concern as well.

In the weeks and the months after September 11, we took unprecedented steps to secure our Nation's airlines, and I think for good reason and to good effect. We all know about the added security, the baggage checks, the passenger screening, because we all see it every time we go to the airport. Let me say, I hope we do not end up, as we move to strengthen security around train stations and passenger rail, see people remove their shoes in order to get onto a train. But we can do better than we have done and we need to.

We have not been as diligent when it comes to protecting our railways, which is even more alarming given the number of people who travel by rail. This year some 24 million people will ride Amtrak, 24 million. All told, there are about 3.4 billion passenger trips in this country this year. Yet we have done very little to protect rail from terrorist attacks. We have created an Achilles heel, I believe, in the Nation's efforts to secure our transportation system.

Amtrak, freight railroads, and local transit agencies are doing what they can, but the Federal Government—that is us—the Federal Government has not done its fair share, and it is time for us to stand up and for us to assume that responsibility.

We come before you today, I come before you today, as a member of the Government Affairs Committee, which oversees the Department of Homeland Security. During the creation of that agency a year or so ago, I along with several of my colleagues, including you, Senator McCain, Senator Hollings, and Senator Biden, tried to provide funds for Amtrak to secure its trains, its facilities, and its infrastructure. But the language that we included in the authorization bill in creating the Department of Homeland Security was stripped in the middle of the night and subsequent efforts to provide for specific funding for rail security have been blocked.

At various hearings with the Homeland Security officials, including Secretary Ridge and Deputy Secretary Loy, I have consistently urged that the administration address our rail security needs. Time after time I have been told that the Department understands these needs and is looking at ways to secure our rail system.

Secretary Ridge, for example, said during his confirmation hearing last year, and I am going to quote: "Amtrak and freight rail are at considerable risk of terrorist attack," close quote. He has also stated that the Transportation Security Administration was working on a number of its own initiatives to help identify and mitigate security threats.

Likewise, Deputy Secretary Loy in November of last year acknowledged the danger posed to our rail system and said rail would need to be a part of transportation security plans that his Department apparently is preparing.

Despite these assurances, however, I have yet to see much progress. Maybe one of the good things coming out of this hearing today was an announcement yesterday from the Department of Homeland Security that they are at least piloting an effort. So something good has come out of the tragedy in Madrid and I think out of the holding of this hearing today.

But in a lot of ways our Nation's rail infrastructure is probably as vulnerable today as it was on 9/11. To my knowledge, the administration has not undertaken a coordinated, systematic assess-

ment of the risks to our passenger and freight railroads. No funds other than those granted to Amtrak to reimburse security costs immediately after 9/11 have been made available for security upgrades.

In fact, when my staff recently asked Homeland Security officials about rail funding, the Administration said it was not sure Amtrak was even eligible for money through any existing grant program.

Now, the Administration responded to the Madrid attacks by saying that it had provided about $115 million to address rail security. Going back to what I think Senator Lautenberg said, to my knowledge only about $35 million of that money has actually been made available, and then only to local transit agencies and not to Amtrak and not to freight railroads.

As a member of the Banking Committee, I know we need to do more to protect our subways and our metro lines, too. No one is saying that we do less. But we should not be ignoring Amtrak, its passengers, or the need to secure the hazardous materials that travel over our freight lines, as Senator Dorgan alluded to before.

Of course, President Bush's budget for this year, like those he has proposed in previous years, is silent on rail security. The budget we just passed in the Senate includes no specific rail security money. The Department of Homeland Security announced a handful of new security initiatives yesterday. We welcome those, but it is unclear how they will be funded and how aggressively they will be pursued.

I believe the recent tragedy in Madrid has opened the eyes of many of our colleagues to the security risks that face our railways today. I would urge them and you and others and the Department of Homeland Security to step up our efforts to improve the security of our rails.

My friend Joe Biden and I have joined Senators Lautenberg, Hollings, and Senator Snowe, in introducing the Rail Transportation Security Act, which will help us begin to address some of the rail security needs. I think we have seen this show before, but the need, the urgency, is greater than ever. This legislation would order the Administration to undertake a risk assessment of rail security threats and devise threats that railways can take to protect passengers, facilities, and infrastructures around the country.

This is what we are asking for, assess the risk, set some priorities with respect to addressing those risks. Look at the rest of the world, what are other countries doing to address these kinds of concerns of their own?

Well, there are many challenges in front of us. We all know that. Certainly, from a feasibility perspective we cannot expect to secure all the rail lines or screen all the rail passengers. But we should be taking a serious look at ways that we can help railroads, States, cities, and transit agencies to do what they can do to improve efforts, such as hire more police or those bomb-sniffing dogs. They work.

Many rail operators, especially Amtrak, barely have enough resources to operate from day to day. We cannot expect them to shoulder 100 percent of their security costs, just as we do not expect the airlines to shoulder 100 percent of theirs.

In closing, I hope the Committee today will ask tough questions of our witnesses and ascertain the true nature and status of the Administration's rail security efforts. We received a lot of assurances from the Administration. I am sorry to say we have seen very little action. But I hope today's hearings can help build momentum to strength the security of our Nation's rail system.

[The prepared statement of Senator Carper follows:]

PREPARED STATEMENT OF HON. THOMAS R. CARPER, U.S. SENATOR FROM DELAWARE

I'd like to thank the Commerce Committee for inviting me here today to discuss something that is a serious concern to millions of Americans, especially in light of the tragedy that occurred in Madrid, Spain a few weeks ago. As a daily Amtrak passenger and a former member of the Amtrak Board of Directors, I have known for some time about the unique security needs of our Nation's rail transportation system.

Today, nearly 25 million passengers ride Amtrak each year and there are nearly 3.4 billion rail transit trips annually. With that in mind, I have worked since September 11, 2001 with a number of my colleagues, including you, Mr. Chairman, and Senator Hollings, to improve the security of our Nation's passenger, freight and commuter railroads.

We are mindful every time we visit an airport or board an airplane of the work we have done in the years since September 11th to make air travel safer in this country. We have also made strides in other areas, such as port security. I firmly believe that we have an obligation to ensure that Americans who ride trains are as safe as those that travel by air or any other mode of transportation. Likewise, citizens across America deserve to know that the thousands of rail shipments carrying hazardous materials that pass through their communities on a daily basis are as secure as is reasonably possible. Amtrak, freight railroads, and local transit agencies are doing all that they can to strengthen the security of their systems, but the Federal Government must do more to help them, as we have done with other transportation sectors.

I come before the Committee today as a member of the Governmental Affairs Committee, which has general oversight over the Department Homeland Security. During the creation of the Department and through numerous oversight hearings, I've attempted to bring the issue of rail security to the attention of my colleagues. In hearings with Homeland Security officials such as Secretary Ridge and Deputy Secretary Loy, I've urged that they consider the needs of rail security and have sought to understand what rail security efforts are ongoing at the Department.

On the legislative front, I cosponsored Senator Hollings' original rail security measure in the 107th Congress and worked to support his efforts with Chairman McCain to pass the Rail Security Act of 2001. Following this, I successfully offered a rail security amendment to the bill creating the Department of Homeland Security that was reported out of Governmental Affairs. That language was ultimately dropped from the bill before final passage, despite my opposition to its removal. Since then, I've introduced ARRIVE–21 with Senators Hollings and Collins, a comprehensive rail infrastructure financing package and Amtrak reauthorization, which includes funding for rail security. I've also cosponsored a separate effort, S. 2216, the Rail Transportation Security Act, introduced last week.

Time after time, I've been told that the Department understands the real security needs of our rail transportation system. During his confirmation process in January 2003, Secretary Ridge stated;

> *"I believe that Congress will need to address Amtrak and freight rail security. Amtrak and freight rail are at considerable risk to terrorist attack. Moreover, state and local police and fire officials have confirmed their limited ability to respond to a major attack. . . . I look forward to working with Congress to support legitimate security enhancements such as better fencing, enhanced lighting, video surveillance for stations, bridges and tunnels, and implementing measures to screen passengers and baggage for dangerous weapons and explosives."*

Additionally, the Secretary acknowledged the role that the Department has in ensuring the security of Amtrak, saying;

> *"I think there is a need for us to take a look at the legitimate security enhancements with Amtrak, and obviously, through whatever appropriation measure that the Congress may be supportive of in the future . . . and if you don't fund*

it, then we will have to work with you to find some other ways to help them on a priority basis deal with most problematic vulnerabilities. I can't tell you what they are, but we need to do a vulnerability assessment and then set priorities and then go about addressing them."

Secretary Ridge has also stated that the Transportation Security Administration was working on a number of its own initiatives. He said they were considering installing Radiological Dispersal Devices (RDD) at key freight rail locations and were addressing the movement of bulk hazardous materials through a "chlorine initiative" pilot project. He also said they had been developing a Rail Inspection Guide for use by rail employees in identifying security risks. I urge my colleagues to inquire today as to the status of these efforts.

At his confirmation hearing this past November, Admiral Loy also acknowledged our Nation's rail security needs and said rail would need to be a part of the transportation security plan that Homeland Security is apparently developing. At that same hearing, however, he hinted that it probably is not possible to make rail as secure as the aviation sector, saying we should focus more on how to recover from an attack than on how to prevent one.

While this statement is alarming, Admiral Loy makes a valid point. It is not possible, nor necessarily desirable, to implement exactly the same kinds of security measures at train stations as we have at airports. However, there is much we can do and I have not seen a concerted effort at Homeland Security to strengthen rail security using all available and reasonable means. In a lot of ways, our Nation's rail infrastructure is probably as vulnerable today as it was on September 10, 2001.

To date, the Department of Homeland Security has been unable to tell me the amount of resources and the number of staff that are specifically dedicated to rail security. To my knowledge, they have not undertaken a coordinated, systematic assessment of the vulnerabilities of our national passenger and freight railroads, beyond ad hoc local efforts. In addition, no funds other than those granted to Amtrak to reimburse security costs directly associated with 9111 have been made available for increased intercity passenger rail security. In fact, when my staff recently asked Homeland Security officials, they said that they were not sure if Amtrak was even eligible for funds from the Department through any existing grant program.

On a related point, the $100 million for life safety improvements given to Amtrak through the U.S. DOT for the New York rail tunnels in 2002 is primarily for safety improvements, not security, as the Administration has claimed. Indeed, we still have $775 million in unmet safety improvements for Amtrak's Northeast Corridor tunnels. Much has also been made of the $115 million Homeland Security has made available for transit security grants. It is my understanding, however, that only $35 million of this $115 million has actually made it out to local transit agencies. In addition, this money does nothing to address Amtrak and freight rail security.

President Bush's FY 05 budget, like its predecessors, requests no specific funding for rail security efforts. The budget we passed just before recess also includes no specific rail security money. The Department of Homeland Security announced a handful of new rail security initiatives just yesterday but it is unclear right now how they will be funded and how aggressively they will be pursued.

I believe the recent tragedy in Madrid has opened the eyes of many of my colleagues to the security risks that our railways face. I urge them and the Department of Homeland Security to step up efforts to improve the security of our railroads. The first step should be to begin conducting comprehensive risk assessments of our major rail assets, as Secretary Ridge has already endorsed. We should also have TSA study the possibility of selected screening of rail passengers. Secretary Ridge stated before the Governmental Affairs Committee that TSA is already engaged in such a study, saying;

"TSA is working with Amtrak to identify requirements for a test project using screening technologies as designated locations. The team's effort is focused on identifying cost effective technologies that can be implemented with minimum impact on the passenger flow and efficiency of rail operations. . . . DHS and TSA will continue to work closely with the rail carriers to implement appropriate countermeasures and technologies that will ensure the security of the tunnels and bridges on Amtrak's northeast corridor and in Washington, D.C. area specifically."

However, I'm unaware of the status of this effort and understand that a pilot screening project at a station near Washington, D.C. has been indefinitely postponed.

We need to begin a serious effort to help railroads, states, cities, and transit agencies pay for key rail security efforts, such as more police and bomb sniffing dogs.

Many rail operators, especially Amtrak, barely have enough resources to operate from day to day. We can't expect them to shoulder 100 percent of their security costs, just as we don't expect the aviation industry to cover all of its security costs.

S.2216, the Rail Transportation Security Act, incorporates many of these suggestions and provides dedicated resources for rail security to the DHS. I urge its quick review and adoption by the Senate.

I hope the Committee today will ask tough questions of our witnesses and attempt to ascertain the full scope and status of the Department of Homeland Security's rail security efforts. We have received a lot of assurances, but I believe we've seen very little action. I hope today's hearing can help us build momentum for efforts to strengthen the security of our rail system.

The CHAIRMAN. Thank you very much. I thank both of you for being here. Thanks again.

Senator BIDEN. Thank you, Mr. Chairman.

The CHAIRMAN. I look forward to working with you.

Our first panel is: the Honorable Asa Hutchison, the Under Secretary for Border and Transportation Security, U.S. Department of Homeland Security; the Honorable Allan Rutter, who is the Administrator of the Federal Railroad Administration; the Honorable Robert Jamison, Deputy Administrator, Federal Transit Administration; and Mr. Peter Guerrero, who is the Director of Physical Infrastructure Issues at the U.S. General Accounting Office, who is accompanied by Mr. Norman Rabkin, who is the Managing Director for Homeland Security at the U.S. General Accounting Office.

Welcome back, Secretary Hutchinson. I want to thank you for all your efforts on this issue. I want to thank you for appearing here today. I want to thank you for your visit to my State of Arizona. I want to thank you for your renewed commitment to the security of our borders. I want to thank you for your active commitment to that and your understanding of the enormous challenges that we face all along our border, and I appreciate the actions that the Department of Homeland Security and the President of the United States have been taking on this very humanitarian and terrible issue.

Thank you and welcome, Secretary Hutchinson. It is nice to see an old friend.

STATEMENT OF HON. ASA HUTCHINSON, UNDER SECRETARY FOR BORDER AND TRANSPORTATION SECURITY, U.S. DEPARTMENT OF HOMELAND SECURITY

Mr. HUTCHINSON. Thank you. May I proceed?

Mr. CHAIRMAN——

The Chairman. Pull that a little closer, Mr. Secretary.

Mr. HUTCHINSON. Mr. Chairman, Members of the Committee: It is a pleasure to be here today, and thank you, Mr. Chairman, for your comments. I did enjoy my recent trip to Arizona and hope we have some great success there. I am grateful for your leadership and the Committee's leadership on efforts to enhance passenger rail and mass transit security. Obviously, the recent attacks against passenger rail in Madrid on March 11, but also in Moscow on February 6, gives us constant reminders that the global threat of terrorism remains and there is much to be done.

I would emphasize that, as was pointed out earlier, there has been historical threats to rail and transit. We do not see any recent indicators that indicate that the threat level should be raised or there is enhanced possibility of an attack. But in the months pre-

ceding these attacks overseas the Department and others have continued to cooperate, taking significant steps to address the vulnerabilities that we see in the rail and transit systems.

After the attack in Madrid, we immediately sent out two information bulletins that provided intelligence to our transit operators, our rail operators, suggested specific protective measures. We hosted a series of telephone conferences that included over 250 State and local participants and transit authority participants, getting both information as to what they were doing and the level of preparedness and also offering assistance and the intelligence that we had at the time.

I also wanted to commend the mass transit and rail industry and the State and local governments for the immediate action that was taken to enhance security immediately following the attacks. It was a natural step to take in order to increase the uniform patrols, the explosive detection teams, increase surveillance, and the public awareness campaigns in the passenger rail and mass transit environment. In addition, I would emphasize the cargo rail companies continue to operate at alert level 2, which increases their security on a day by day basis.

From the Department's perspective, we recognize that there is a Federal role to play in transit authority and this authority has been given by the Congress of the United States. Through the TSA and our Information Analysis and Infrastructure Protection Directorate, as well as in cooperation with the Department of Transportation, criticality assessments have been conducted in the high intensity urban transit arena. This has allowed us to identify and allocate $115 million in targeted security grants through our Office of Domestic Preparedness.

Through TSA, we are also coordinating intelligence information and threat-sharing with the railroads and the Public Transportation Association. In the area of preparedness and response, we have developed a number of security exercises that have addressed potential gaps in anti-terrorism training among rail personnel. We have had an exercise at the Naval War College in Newport, Rhode Island, in which State and local law enforcement transit authorities were invited to participate.

In addition, as was noted, yesterday Secretary Ridge emphasized additional steps that the Department will be taking. First, we intend to engage industry and State and local authorities to establish baseline security measures. This is based upon the best practices, the common sense approach that is taken in a higher threat environment. In addition to this baseline, we will have additional measures that will be taken, layered measures based upon threat-specific intelligence that we receive, or going to a higher threat level of orange.

In addition, whenever we want to move to a higher level of security we can issue security directives and technical assistance, and this willingness to use this authority represents a substantial increase in the Federal leadership role in rail and mass transit security. We expect this baseline to be considered interagency within 2 weeks. The Department of Homeland Security will share the enforcement responsibilities, ensuring compliance, with the Department of Transportation.

The second aspect of the initiative is threat response support capability through the development of rapid deployment mass transit K–9 teams that would be available whenever the need is there, when the threat is there, identified intelligence for a particular concern and that we can offer assistance.

In addition, we will be deploying a transit inspection pilot. This is not to mirror the solution in the aviation industry, but it is to develop our expertise so that when we have a particular transit system or particular threat then we can have the experience to deploy a more comprehensive screening of luggage and carry-on bags and personnel.

In addition, we will engage more comprehensively in education and public awareness. The thousands and millions of transit passengers each day provide us the best protection. We can increase to awareness and education. Through our Federal Law Enforcement Training Center, we are enhancing our training of transit authorities' and the law enforcement personnel to know what to look for and to assist them in their education awareness programs.

Finally and very importantly is the research and development component. We need to have a new generation of technology that is applicable to the rail and transit environment, that is more mobile, that can look through the passenger areas without intense personal screening in order to detect the presence of explosives. Is this on the horizon? We will wait and see, but we are investing money in research and development, increasing this effort. $5 million will be going out in a broad area announcement very soon in order to partner with private industry to develop this new generation of technology.

Those are some of the things that we are working on in addition to the traditional roles that we have at the Department. We look forward to working with this Committee and look forward to the discussion today.

[The prepared statement of Mr. Hutchinson follows:]

PREPARED STATEMENT OF HON. ASA HUTCHINSON, UNDER SECRETARY FOR BORDER AND TRANSPORTATION SECURITY, DEPARTMENT OF HOMELAND SECURITY

Good morning Mr. Chairman, Senator Hollings, and Members of the Committee. It is my pleasure to be here today to speak with you about the Department's ongoing and planned efforts to enhance Passenger Rail and Mass Transit security.

The tragic bombings that occurred in Madrid on March 11, and those that occurred in Moscow on February 6 were terrible reminders that the war 'on terror is not yet over and that much work remains to be done. Our prayers and our deepest sympathies are with the families and friends of the hundreds of innocents who died in these attacks, and with those for whom the road to recovery will be long and painful. And our resolution remains firm. We will not tolerate these sorts of cowardly acts, nor will they deter us from support of the liberties that make our Nation great.

I would like to begin by stating that we do not have any specific indications that terrorist groups are planning such attacks in the U.S. Furthermore, in the months preceding the Madrid and Moscow incidents, the Department, in close cooperation and coordination with our partners at the Department of Transportation, and state and local governments and transit and rail operators, has taken a number of steps to respond to vulnerabilities in the rail and transit systems and improve our security posture against similar attacks.

In the immediate aftermath of the Madrid attacks, the Department released two Information Bulletins on the Madrid Bombing to the transportation sector, state and local homeland security officials, public safety community, and law enforcement. The Bulletins provided specific indicators of such operations and suggested protec-

tive measures. It is important to note that over the last year, the Department has issued a number of such bulletins to rail and transit operators. We have long been aware of the possibility of such attacks and have sought to provide as much information as possible to those at the state and local level who are responsible for keeping the trains running on time, so to speak.

After Madrid, the Department also hosted a National Conference Call with over 170 participants from federal, state and local public safety communities, all State and Territorial Homeland Security Advisors, and officials from 50 major urban areas. In addition, we hosted a conference call with approximately 75 participants from Association of American Railroads (AAR), American Public Transportation Association (APTA), and the Surface Transportation Information Sharing and Analysis Center (ST–ISAC), and representatives from the Nation's largest transit systems. We used these calls to communicate current information on the attacks, obtain an assessment of the level of preparedness of transit and rail systems in the U.S., and determine what short-term measures ought to be taken to reduce vulnerabilities across our Nation's transit and rail systems.

It is also very important that we analyze carefully what happened in Spain two weeks ago and apply lessons learned in order to deter and prevent similar attacks in the United States. To that end, DHS is working closely with Spanish authorities to examine available information, and generate "lessons learned" on how these terrible attacks transpired for application here in the U.S. In addition, the Department continues to share intelligence and other information with state and local authorities, as well as with the private sector, to ensure vigilance in light of these incidents.

DDS Initiatives

Prior to the attacks in Moscow and Madrid, agencies within the Department were already working with their Federal and state counterparts to bolster the security of rail and mass transit systems for the approximately 11.3 million passenger trips each weekday. DHS efforts have focused on information sharing, awareness, prevention, response and recovery to a potential terrorist rail attack in the United States.

Over the last two years, DHS and DOT have worked with transit and rail operators to improve security significantly. TSA, the Infrastructure Protection Division of the Information Analysis and Infrastructure Protection (IAIP) Directorate, and DOT's FRA and FTA have conducted criticality assessments of rail and transit networks operating in high-density urban areas. As a result of these assessments, these systems produce robust security and emergency preparedness plans.

Between FY 2003 and this year, DHS has used information from these assessments to allocate $115 million to high-risk transit systems through the Urban Area Security Initiative (UASI) in the Office of Domestic Preparedness. Sixty-five million dollars ($65 million) was allocated in Fiscal Year 2003 and $50 million was allocated in Fiscal Year 2004. Grantees may use these funds for such expenses as the installation of physical barricades, video surveillance systems, motion detectors, thermal/IR imagery and chemical/radiological material detection systems, integrated communications systems and for prevention planning, training and exercises, among other things.

The Department is coordinating information and threat sharing through the Information Sharing and Analysis Center in partnership with the Association of American Railroads and American Public Transportation Association. As part of the significant partnership that the Department has developed with AAR and the ST–ISAC, TSA hosts ST–ISAC representatives at the Transportation Security Coordination Center (TSCC) in Virginia.

TSA has partnered with FTA on its "Transit Watch" Program, and is coordinating with FRA to develop a rail system inspection guide for use by rail law enforcement and security personnel to inspect trains for explosives and other threats. The BTS Federal Law Enforcement Training Center has provided security training to rail and transit operators; and TSA has distributed educational information to transit system employees on how to recognize and respond to potential terrorist attacks.

TSA has also hosted numerous security exercises to bring together rail carriers, Federal and local first responders, and security experts, to address potential gaps in antiterrorism training among rail personnel. One such security exercise occurred at Union Station Washington, DC in July 2003 and involved stakeholders, emergency responders and enforcement agencies all working to implement the station's Emergency Response Plan. The lessons learned from this exercise are being utilized to enhance rail security for the entire Northeast corridor.

In another security exercise, DHS, through TSA, co-partnered with the Naval War College Gaming Department to conduct the exercise game, "Operation Heartland" at the Naval War College in Newport, Rhode Island on January 27–28, 2004. Oper-

ation Heartland was designed to exercise and evaluate security awareness, prevention, response and recovery of the national transportation system to a security incident. Participation included eleven Federal agencies, state and local agencies from Iowa and Illinois, Amtrak, and representatives from private industry including BNSF Railroad, Union Pacific Railroad, and Ingram Barge Company.

State/local/private sector actions

In addition to the Federal Government's actions and initiatives, I would be remiss if I didn't commend the mass transit and rail industry, and State and local governments, for their proactive response in addressing homeland security issues, both pre and post-9/11, and following the Moscow and Madrid bombing incidents. Most recently, transit and rail system operators have enhanced their existing security plans by taking various preventive measures in cooperation with the Department. While specific examples should not be given in a public forum, significant commitments have been made in increased canine and uniformed patrols, increased surveillance, and reporting and awareness campaigns in the passenger environment. Relatedly, cargo rail companies are continuing their Alert Level 2, which includes increased security at designated facilities, security plan review, and increased spot identification checks.

Near Term Actions

In the wake of Madrid, the Department immediately identified additional measures that could be implemented in the near term to further strengthen our rail and transit systems. A working group comprised of senior members of my staff, officials from the Transportation Security Administration (TSA), the Information Analysis and Infrastructure Protection (IAIP) Directorate; the Department of Transportation's (DOT) Federal Railroad Administration (FRA) and Federal Transit Administration (FTA), identified several such measures. Yesterday, Secretary Ridge and I met with rail and transit officials and announced the following measures to provide additional Federal leadership and guidance in the rail and transit security arena:

Leadership

The Department will build on many of the security measures recommended during the past two years for implementation to mass transit and passenger rail authorities by DHS, the Federal Transit Administration (FTA) and the Federal Railroad Administration (FRA). The Department will engage the industry and state and local authorities to establish base-line security measures based on current industry 'best practices'. This includes all existing security measures currently being implemented consistently in the mass transit system and the commuter rail environment. These base-line measures could be adjusted in consultation with transit and rail system owners and operators in response to higher threat levels or specific threats in the future. Additional measures could be achieved through the use of security directives or technical assistance, which would specifically target mitigation of identified vulnerabilities. DHS, in coordination with DOT, will ensure compliance with security standards for commuter and rail lines

Threat Response Support Capability

Mass Transit K–9 Program

The Department will develop a rapid deployment Mass Transit K–9 program by utilizing existing Homeland Security explosive K–9 resources. These mobile DHS response teams will be prepared to assist local law enforcement teams. Federal Protective Services K–9 teams would also be cross-trained for utilization in the rail and transit environment. Building upon TSA's work in the aviation context, DHS will partner with local authorities to provide additional training and assistance for local K–9 teams. The mobile program would predominantly be used in special threat environments and provide additional Federal resources to augment state and local transit and rail authorities security measures.

Transit Inspection Pilot

TSA will implement a pilot program to test the feasibility of screening luggage and carry on bags for explosives at rail stations and aboard trains. The initial program will be implemented at one station with commuter rail service in conjunction with Amtrak and the Federal Railroad Administration. The pilot program would not resemble an aviation type solution to transit and rail, but rather provide the Department with a venue to test new technologies and screening concepts. The lessons learned from .the pilot could allow transit operators to deploy targeted screening in high threat areas or in response to specific intelligence.

Education and Awareness

DHS will integrate existing passenger and rail education and awareness programs that have been developed by industry, TSA and FTA. Where necessary, the Department will create new programs to increase passenger, rail employee, and local law enforcement awareness through public awareness campaigns and security personnel training. A number of training templates and rider education materials are currently in development by TSA and FTA allowing the Department to leverage existing efforts to generate additional public awareness. The Department's Federal Law Enforcement Training Center will also accelerate current security training programs for transit law enforcement personnel.

Future Technological Innovations

The Department's Science and Technology division is focusing on development of a number of homeland security technologies. Many of these could or are being used in the mass transit environment including chemical and biological countermeasures.

High Explosives Countermeasures

The Department's Homeland Security Advanced Research Project Agency is developing a Broad Agency Announcement on bomb interdiction for truck and suicide threats with approximately $5 million in funding that will be released in the coming months. This program will focus on research and development of next generation technology for High Explosives Countermeasures. In the future, these countermeasures could address the threat that terrorists might use explosives in attacks on buildings, critical infrastructure, and the civilian population of the United States. The goal of the program will be to develop and test field equipment, technologies and procedures to interdict suicide bombers and car and truck bombs before they can reach their intended targets while minimizing the impact on the American way of life. This effort will be closely coordinated with the activities ongoing in TSA to ensure that research and development activities are complementary and allow potential future testing be carried out through TSA's Transit Inspection Pilot.

Thank you again for the opportunity to appear before you on this important topic. I look forward to answering any questions you may have.

The CHAIRMAN. Thank you very much.

Welcome back, Mr. Rutter.

STATEMENT OF HON. ALLAN RUTTER, ADMINISTRATOR, FEDERAL RAILROAD ADMINISTRATION

Mr. RUTTER. Thank you, sir. Chairman McCain, Members of the Committee: I appreciate the opportunity to appear today to discuss the prospects for rail security in the United States. I have submitted testimony to the Committee that goes into detail about what the Federal Railroad Administration has been doing on security in addition to our work in advancing rail safety. I request that this statement be included in the record of this proceeding and I will be happy to entertain questions at the conclusion of opening statements.

The CHAIRMAN. Without objection, your full statement will be made a part of the record.

Mr. RUTTER. The Federal Railroad Administration has advanced the cause of security by using many of the methods we use in improving rail safety. We have acted as a partner, a catalyst, an adviser, a facilitator, a technician, and an inspector. In the past, rail safety and security were intertwined. September 11 made it clear, however, that more attention and resources for security issues was going to be required in all modes of transportation.

Creation of the Department of Homeland Security catapulted security to the forefront of the Federal Government's priorities, and the primary responsibility for rail security was designated to that Department. Yet, since many of the basic functions will continue to be intertwined, FRA works closely with DHS on security issues,

while on a daily basis we use the skills and knowledge of FRA professionals to help make railroads more secure for passengers, for rail employees, and for communities served.

Allow me to summarize some of the activities we have participated in since September 11, as described in my testimony. We have assisted Mr. Jamison's colleagues at FTA in conducting security assessments of the ten largest commuter railroads, contributing our technical expertise and some modest funding. After the Madrid bombing, FRA conducted on-site inspections of terminals, stations, passenger equipment, and facilities on Amtrak and the 18 commuter railroads under our safety jurisdiction. The purpose of these inspections was to monitor the implementation of enhanced security measures.

FRA and RSPA have worked extensively with DHS to develop options to enhance the security of railroad tank cars that carry hazardous materials. And the FRA has hired the RAND Corporation to work with Amtrak to develop a comprehensive strategic security plan to coordinate security across the entire Amtrak system.

Let me make three additional points to accompany my written statement. First, while I have read many comments about the challenges facing rail security since the Madrid bombings and I certainly expect that many on your second panel will not be shy about asking for more financial assistance, I do not want the Committee or the American public to ignore the substantial accomplishments and activity of this industry since and before and after 9/11.

Much the excellent progress has been made as a result of the hard work of rail system owners and operators. While we remain vigilant in sensing the need for additional statutory, regulatory, and financial steps to advance security, I remain impressed by how much has been accomplished.

Second, I think we need to be conscious of the differences between passenger rail operations and aviation, as the security regimes for both need to be different. One small example. In commercial aviation we have extensive systems for detecting metal objects that can be used as a weapon to hijack a plane. Since control of a moving train in most cases takes place by people not accessible to the passengers, metal detection is not as important as explosives detection. DHS continues to research portable explosion detection technologies that could be used aboard trains or for random checks of persons boarding trains, operating in the challenging environmental conditions that commuter rail passengers face all around the country. This, coupled with increased K–9 patrols, may be a more effective security strategy than screening all passengers and bags at every train station.

Third, I continue to believe that one of the major contributions our agency and I can make in security discussions is to remind people of the importance of the functionality of our rail transportation system. For example, in order to guard against the possible effects of terrorist acts against rail shipments of hazardous materials, it might be tempting to simply suggest re-routing such shipments around major metropolitan areas. But we would have to consider the operational consequences on major cities, for which the shipments of critical products that contain highly hazardous materials are destined. Most major cities must have chlorine to purify water

supplies. Anhydrous ammonia is critical for agricultural production. Many citizens in rural areas depend on liquefied petroleum gas for home heating.

Considering the consequences of even significant delays in transit, much less a ban on these substances, we are working with DHS to consider the operational issues in considering HAZMAT security strategies.

My point is this: Security is a very important function of the Federal Government, but it is not its only purpose. The promotion of domestic tranquility and the promotion of the common defense is balanced in our Constitution's preamble with the purpose of securing the blessings of liberty for our citizens and our posterity. The Nation's rail transportation system is an important link to how people build, make, and sell things and how they get to their jobs. We at the FRA will continue to advocate for a balance between security and economic liberty so that our citizens can be protected from those who wish to do us harm as we continue to offer opportunities for personal and economic freedom.

Thank you. I look forward to responding to your questions.

The CHAIRMAN. Thank you very much.

Mr. Jamison.

STATEMENT OF HON. ROBERT JAMISON, DEPUTY ADMINISTRATOR, FEDERAL TRANSIT ADMINISTRATION

Mr. JAMISON. Mr. Chairman and Members of the Committee: Thanks for this opportunity to provide you with information about Federal Transit Administration's efforts to deter, detect, and respond to terrorism on our Nation's rail transit systems. Some form of rail transit serves 30 cities and 22 states. Many cities have more than one form of rail transit, including commuter rail, heavy rail, or subway systems and light rail systems.

As you are aware, transit is designed and operated in an open environment. It is a potential high visibility, high consequence target that, if attacked, could have a significant economic impact on the community and the Nation. Rail transit carries over 11 million passengers each day. In one week transit moves more passengers than Amtrak carries in a year. In one month transit carries more passengers than U.S. airlines transport in a year. The majority of transit riders are in dense urban environments that run under or near major employment centers, government operations, or cultural icons.

Our challenge is to ensure that we maintain robust mobility and transportation options that support the economic and mobility needs of our citizens, while making our transit systems as safe and secure as possible. In fact, as the experience of September 11 has demonstrated, public transit systems are essential to our national security. Transit trains and buses were key to the swift evacuation of affected areas and were used to transport emergency workers and supplies to the rescue and recovery sites and they served as emergency triage centers and temporary shelters.

Prior to September 11, most transit agencies focused their security programs primarily on routine crime and vandalism. The situation has changed. The industry has responded. FTA began conducting counterterrorism threat and vulnerability assessments at

37 of the Nation's largest transit systems within 60 days of September 11. We employed an aggressive nationwide transit security program with the full cooperation and support of every transit agency.

In addition to the counterterrorism readiness assessment, FTA has awarded 83 grants for emergency drills conducted by transit agencies in conjunction with police, fire, and emergency responders, provided onsite counterterrorism technical assistance to 29 transit agencies, with plans to reach all the top 50 transit agencies, conducted 18 regional emergency preparedness forums, completed 4 regional transit terrorist war games in conjunction with the American Public Transportation Association, provided employee awareness training to more than 46,000 transit employees, developed and distributed standard protocols and guidelines for responding to chemical and biological incidents in rail, tunnel, and vehicle environments, championed transit agency participation in FBI's Joint Terrorism Task Forces, funded and worked on a daily basis with the transit-specific intelligence sharing and analysis center, in which 160 agencies now participate, launched Transit Watch, a nationwide emergency response passenger awareness program, provided and actively monitored the largest 50 agencies' actions with respect to FTA's top 20 security action items list, funded research to identify and adapt security technologies such as chemical weapon detection to a transit environment, developed and issued to transit agencies specific recommended action steps to take at each homeland security advisory system threat level.

Mr. Chairman, we recognize that intelligence is our Nation's first line of defense in transit environments and we rely on the Department of Homeland Security and the FBI for such information. We also recognize that, while we must continue to pursue technology solutions, there is no technological quick fix for security concerns, nor is there a substitute—and I will repeat—nor is there a substitute for an alert and well-prepared transit workforce and passenger community.

Therefore, FTA continues to focus its primary efforts and three key priorities: employee training, public awareness, and emergency preparedness. FTA's top 20 action items has helped to institutionalize these security programs, focusing on management and accountability, security problem and identification, employee selection, employee training, security audits and emergency response drills, document control, and access control.

The 30 largest transit agencies accounted for at least 80 percent of these action items in Fiscal Year 2003. In Fiscal Year 2004, FTA is focused on maintaining this success and expanding it to the next 20 largest transit agencies.

Mr. Chairman, we must keep our communities safe and moving, maintaining the important balance among security demands, mobility needs, and economic viability that transit provides to every community it serves.

I would be pleased to answer the questions the Committee may have.

[The prepared statement of Mr. Jamison follows:]

PREPARED STATEMENT OF HON. ROBERT JAMISON, DEPUTY ADMINISTRATOR, FEDERAL TRANSIT ADMINISTRATION

Mr. Chairman and Members of the Committee, thank you for the opportunity to testify today on behalf of the Federal Transit Administration (FTA) regarding security on America's rail transit systems.

America has some form of rail transit (*i.e.,* some combination of subway, light rail and/or commuter rail systems) in 30 cities and 22 states. These systems provide 11.3 million passenger trips each weekday. In fact, of the 3.5 million rail trips taken annually, 77 percent are on heavy rail systems, more commonly known as subways. All rail transit systems are locally operated and controlled, and it is important to note that FTA does not provide operating funds for these systems.

As you know, public transportation is inherently an open, accessible system intended to help people move rapidly and efficiently between home and work, shopping, medical care, and other community activities on a daily basis. Let me put the challenges of securing these environments in perspective:

- Prior to their destruction on September 11, the World Trade Center and Fulton Street subway stations alone handled over 380,000 people each day—the equivalent of the entire population of Miami, Sacramento, or Pittsburgh..
- Over 1,600 people *per minute* hurry through dozens of access points into New York's Penn Station during a typical rush hour.
- Every weekday, the people of Chicago take over 1.5 million trips on the elevated railway's 222 miles of track, compared to the approximately 100,000 passengers who board planes at the Chicago O'Hare Airport.
- In Washington DC, Metrorail operates a fleet of over 840 railcars on 103 miles of track in two states and the District of Columbia. In 2002, 181 million trips were taken on Metrorail, 25 times more than the 7 million trips originating at Washington's Reagan National Airport.

As both the Department of Homeland Security and the Department of Transportation recognize, our Nation's approach to security must be necessarily different in the fast-paced, congested environment of rail transit than in the relatively closed environment of airlines and airports. Nevertheless, we have pursued increased rail transit security no less vigorously than air travel security.

Since September 11, 2001, FTA has undertaken an aggressive nationwide security program with the full cooperation and support of every transit agency involved. In each of these important rail cities, FTA has, in concert with the transit agencies, conducted risk and vulnerability assessments; deployed, at no cost to the transit agency, expert technical assistance teams to help strengthen security and emergency preparedness plans; and, as part of a $3 million program involving 83 transit agencies, funded emergency response drills conducted in conjunction with local fire, police and other emergency responders.

Based on the full complement of threat and vulnerability assessments that have been conducted, as well as consultations with security experts around the world, FTA has pursued a consistent strategy of promoting emergency preparedness planning, employee training, and public awareness as the best way to prevent and mitigate the consequences of a terrorist attack. Among other important steps, FTA has done the following:

- Issued a list of the Top 20 Action Items for transit agencies, identifying the most important elements to incorporate into their Security System Programs. These elements formed the basis of one of four FTA Core Accountabilities for Senior Executives in Fiscal Year 2003, and I am pleased to report that the 30 largest transit agencies accomplished at least 80 percent of these action items. This year, our goal is to ensure that those agencies complete 90 percent of the action items and to help the next 20 largest transit agencies complete at least 80 percent.
- Developed the ability to communicate instantaneously with the general managers and heads of security of the 100 largest transit agencies. This communications system is tested and used on a regular basis to provide updates on incidents, as well as security information bulletins and advisories.
- Funded and worked on a daily basis with the public transit Information Sharing and Analysis Center (ISAC) operated under the auspices of the American Public Transportation Association (APTA), to provide two-way communication between the intelligence community and the transit industry, as well as transit-specific intelligence analysis.

- Developed and launched "Transit Watch" in the fall of 2003. Transit Watch is a nationwide emergency response passenger awareness program, developed and implemented in partnership with the APTA, Community Transportation Association of America (CTAA), the American Transit Union (ATU), and the Transportation Security Administration (TSA).
- Developed and will deliver this spring, Security Design Criteria for use by transit agencies as they design or redesign infrastructure, communications, access control systems, and other transit system components.
- Developed and delivered new security courses through the National Transit Institute (NTI), including Counterterrorism Strategies for Transit Police, Conducting Emergency Drills, and Passenger Monitoring and Awareness, as well as updated versions of transit security courses and security needs assessments.
- Developed and will deliver this spring, a web-based training tool for use by communities to conduct table-top emergency preparedness drills to test agency procedures, share best practices, and identify needs.
- Tested and provided targeted manufacturers and key transit agencies with information on the costs and benefits of chemical and biological detection systems.
- Developed, in conjunction with Argonne National Laboratories, and distributed to transit agencies standard protocols and guidelines for responding to chemical and biological incidents in rail, tunnel and transit vehicle environments.
- Issued to transit agencies specific guidelines outlining steps to take at each Homeland Security Advisory Level.
- Have substantially completed development and will soon deliver, a passenger behavioral monitoring course that incorporates the latest in international counter terrorism techniques. This course will heighten the effectiveness of the transit industry's awareness training portfolio.

During the recent "Orange Alert," the 30 largest transit agencies provided, at PTA's request, information about the specific actions they were taking as a result. These actions include the following:

- Assigning bomb-sniffing dogs to patrol bus yards and train repair facilities.
- Maintaining all police specialty vehicles in a state of operational readiness.
- Conducting more frequent Operational Control Center critical system backup checks.
- Sending reminders to all transit employees, including bus and rail operators, about what to look for and how to respond to suspicious packages and individuals.
- Assigning transit police to the local police department command center.
- Participating in conference calls with the FBI and emergency management personnel from the region.
- Notifying rapid response team members of potential for call-up.
- Issuing pager and text message alerts to operators and police.
- Checking all security systems, including lighting and intruder alarms.

Consistent with the current alert level, most transit agencies are now operating under "Yellow Alert" guidelines. However, based on specific intelligence information, several large systems continue to operate at the higher "Orange Alert" level.

The President's FY 2005 budget also reflects a continued commitment to making our public transportation systems as safe and secure as possible. In FY 2005, we have requested $37.8 million for security initiatives, which remain a high priority. This reflects the one-percent of Urbanized Formula Grant funding that grantees are required by statute to use to increase the security and safety of an existing or planned mass transportation system, as well as FTA investments in security training for transit system employees, emergency preparedness and response activities, and public awareness efforts.

Finally, I would note that we continue to work directly with the Department of Homeland Security (DHS) on a daily basis, particularly in the area of intelligence analysis. We are confident that DRS, as it prioritizes *all* of our Nation's security needs, threats and vulnerabilities, can and does take into account these issues with respect to transit.

Despite the complete devastation of three subway stations and over 1,500 feet of track in Lower Manhattan on September 11, no passengers or subway personnel lost their lives in the attacks, thanks to the training and quick thinking of train operators, dispatchers, and transit managers. Today, we are proud to say that America's

subways, light rail systems, and commuter trains are even better prepared to help prevent and respond to such emergencies.

We appreciate the Committee's continued interest in and concern about rail transit security, and I would be pleased to respond to any questions you may have.

The CHAIRMAN. Thank you very much.

Mr. Guerrero.

STATEMENT OF PETER F. GUERRERO, DIRECTOR, PHYSICAL INFRASTRUCTURE ISSUES, U.S. GENERAL ACCOUNTING OFFICE; ACCOMPANIED BY NORMAN J. RABKIN, MANAGING DIRECTOR FOR HOMELAND SECURITY, U.S. GENERAL ACCOUNTING OFFICE

Mr. GUERRERO. Thank you, Mr. Chairman.

We appreciate the opportunity to provide testimony on the security of our Nation's rail systems. Terrorist attacks around the world, including the recent attacks in Spain, have shown that rail systems, like all modes of transportation, are potential targets of attack. Passenger and freight rail services are critical to our economic well-being. Transit agencies provide an average of 1.2 million passenger trips each weekday and Amtrak operates a 22,000-mile network providing service to 64,000 passengers each day. The Nation's freight network also handles 42 percent of domestic intercity freight, everything from lumber to vegetables to hazardous materials.

Even before the recent terrorist attacks in Spain, rail systems have been the target of terrorist attacks worldwide. The first large-scale attack using a chemical weapon occurred in 1995 on the Tokyo subway system. It killed 11 people and injured about 5,000. According to the Mineta Institute, surface transportation systems were the target of more than 195 terrorist attacks from 1997 through the year 2000. Rail systems accounted for over one-third of these attacks.

Passenger and freight rail providers face significant challenges in improving the security of their systems. Challenges include the funding of security improvements, the interconnectivity of the rail system with other transportation modes and with our economy, and coordination among the large number of stakeholders involved in rail security.

A key challenge faced by all rail systems is that of funding security enhancements. For example, eight of the ten transit agencies we visited estimated security enhancements would cost $700 million and one transit agency alone estimated that a closed circuit TV system would cost them $250,000. That amount is equal to at least a quarter of the capital budget of a majority of the transit agencies we surveyed.

The economic environment at the time we did our work made it difficult for private industry or State and local governments to make security investments. The weak economy had decreased ridership and revenues and large State and local budget deficits had forced difficult tradeoffs between security investments and other needs, such as service expansion and equipment upgrades.

In addition to these broad challenges, certain characteristics of mass transit systems make them inherently vulnerable to terrorist attacks and difficult to secure. Mass transit systems are open and

designed to move large numbers of people quickly. It is difficult to secure these systems and to monitor and control who enters or leaves the systems. Transit and rail agencies must balance security concerns with accessibility, convenience, and affordability.

The size and diversity of the freight rail system also makes it difficult to adequately secure. The freight rail system's extensive infrastructure crisscrosses the Nation and extends beyond our borders to move millions of tons of freight each day. There are over 100,000 miles of rail in the United States and the extensiveness of this infrastructure creates an infinite number of targets for terrorists.

The transportation of hazardous materials by rail is a particular concern because serious incidents involving these materials have the potential to cause widespread disruption or injury. In 2001, over 83 million tons of hazardous materials were shipped by rail. We visited a number of local communities to obtain their views about their ability to respond to hazardous material incidents involving rail and to determine what concerns they might have about the transportation of these materials through their communities. A number of issues emerged, including:

The need for measures to better safeguard hazardous materials temporarily stored in rail cars while awaiting delivery to their ultimate destination, a practice the rail industry refers to as "storage in transit";

The advisability of requiring companies to notify local communities of the types and quantities of materials stored in transit and the appropriate amount of information rail companies should be required to provide to local officials regarding hazardous materials shipments that pass through their communities.

Since September 11, passenger and rail freight providers have worked to strengthen security. Although security was a priority before September 11, the terrorist attacks elevated its importance and urgency. Passenger and rail freight providers, as you heard this morning, have taken a number of actions, including: conducting vulnerability and risk assessments; increasing the frequency of emergency drills; revising and updating security plans; and providing additional employee training.

The Federal Government has also taken steps to enhance rail security. As you also heard this morning, the Federal Transit Administration has provided grants, emergency drills, offered security training, conducted assessments, and provided technical assistance. We reported last summer that TSA was moving forward with efforts to secure the entire transportation system, such as developing standard risk assessment tools and establishing security standards.

Mr. Chairman, although steps have been taken to enhance passenger and freight security since September 11, the recent terrorist attacks in Spain naturally focuses our attention and what more can be done. In our previous work on transportation security, we identified future actions that could be taken. In our December 2002 report on mass transit, we recommended that the Secretary of Transportation seek a legislative change to allow mass transit agencies more flexibility in using Federal grants for security-related expenses. We have also advocated using a risk management approach

to direct Federal resources to areas of highest priority, where threats, critical assets, and vulnerabilities intersect.

Finally, we reported in June 2003 that the roles and responsibilities of TSA and DOT in transportation security, including rail security, were not clearly delineated, creating the potential for duplication and conflicting efforts as both entities work to enhance security. To clarify the roles and responsibilities of TSA and DOT in transportation security, we recommended that the Secretary of Transportation and the Secretary of Homeland Security use a mechanism such as a Memorandum of Agreement to clearly delineate their respective roles and responsibilities. This is especially important in light of DOT's continuing responsibility for transportation safety and its potential overlap with DHS's role in security.

This concludes my statement and we would be pleased to answer any questions.

[The prepared statement of Mr. Guerrero and Mr. Rabkin follow:]

GAO HIGHLIGHTS

Rail Security

Some Actions Taken to Enhance Passenger and Freight Rail Security, but Significant Challenges Remain

Why GAO Did This Study

Passenger and freight rail services are important links in the Nation's transportation system. Terrorist attacks on passenger and/or freight rail services have the potential to cause widespread injury, loss of life, and economic disruption. The recent terrorist attack in Spain illustrates that rail systems, like all modes of transportation, are targets for attacks. GAO was asked to summarize the results of its recent reports on transportation security that examined (1) challenges in securing passenger and freight rail systems, (2) actions rail stakeholders have taken to enhance passenger and freight rail systems, and (3) future actions that could further enhance rail security.

What GAO Recommends

In our previous report on transportation security (GAO–03–843), we recommended that the Department of Homeland Security and Transportation use a mechanism, such as a memorandum of agreement, to clarify and delineate TSA's and DOT's roles and responsibilities in transportation security matters. DHS and DOT generally agreed with the report's findings; however, they disagreed with the recommendation. We continue to believe our recommendation has merit and would help address security challenges.

What GAO Found

Securing the passenger and freight rail systems are fraught with challenges. Some of these challenges are common to passenger and freight rail systems, such as the funding of security improvements, the interconnectivity of the rail system, and the number of stakeholders involved in rail security. Other challenges are unique to the type of rail system. For example, the open access and high ridership of mass transit systems make them both vulnerable to attack and difficult to secure. Similarly, freight railroads transport millions of tons of hazardous materials each year across the United States, raising concerns about the vulnerability of these shipments to terrorist attack.

Passenger and freight rail stakeholders have taken a number of steps to improve the security of the Nation's rail system since September 11, 2001. Although security received attention before September 11, the terrorist attacks elevated the importance and urgency of transportation security for passenger and rail providers. Consequently, passenger and freight rail providers have implemented new security measures or increased the frequency or intensity of existing activities, including performing risk assessments, conducting emergency drills, and developing security plans. The Federal Government has also acted to enhance rail security. For example, the Federal Transit Administration has provided grants for emergency drills and conducted security assessments at the largest transit agencies, among other things.

Implementation of risk management principles and improved coordination could help enhance rail security. Using risk management principles can help guide Federal programs and responses to better prepare against terrorism and other threats and to better direct finite national resources to areas of highest priority. In addition, improved coordination among Federal entities could help enhance security efforts across all modes, including passenger and freight rail systems. We reported in June 2003 that the roles and responsibilities of the Transportation Security Administration (TSA) and the Department of Transportation (DOT) in transportation security, including rail security, have yet to be clearly delineated, which creates the potential for duplicating or conflicting efforts as both entities work to enhance security.

STATEMENT OF PETER F. GUERRERO, DIRECTOR, PHYSICAL INFRASTRUCTURE ISSUES; AND NORMAN J. RABKIN, MANAGING DIRECTOR, HOMELAND SECURITY AND JUSTICE ISSUES, UNITED STATES GENERAL ACCOUNTING OFFICE

Mr. Chairman and Members of the Committee:

We appreciate the opportunity to provide testimony on the security of our Nation's rail systems. Although most of the early attention following the September 11 attacks focused on aviation security, emphasis on the other modes of transportation has since grown as concerns are voiced about possible vulnerabilities, such as introducing weapons of mass destruction into this country through ports or launching chemical attacks on mass transit systems. Moreover, terrorist attacks around the world, such as the recent terrorist attack in Spain, have shown that rail systems, like all modes of transportation, are potential targets of attack.

As you requested, our testimony today focuses on (1) challenges in securing rail systems, (2) steps rail stakeholders have taken to enhance security since September 11, and (3) future actions that could further enhance rail security. Our comments are based on our reports and testimonies on the security of the entire transportation system, the security of mass transit systems, and railroad safety and security [1] as well as a body of our work undertaken since September 11 on homeland security and combating terrorism.

Summary

- Securing passenger and freight rail systems is fraught with challenges. Some security challenges are common to passenger and freight rail systems, such as the funding of security improvements, the interconnectivity of the rail system, and the number of stakeholders involved in rail security. For instance, government agencies at the federal, state, and local levels and private companies share responsibility for rail security. The number of stakeholders involved in transportation security can lead to communication challenges, duplication, and confusion. Other security challenges are unique to the type of rail system. For example, the transport of hazardous materials by rail is of particular concern because serious incidents involving these materials have the potential to cause widespread disruption or injury. We recommended in April 2003 that DOT and DHS develop a plan that specifically addresses the security of the Nation's freight rail infrastructure.[2] DHS has informed us that this plan is in progress.
- Passenger and freight rail providers have acted to enhance security since September 11. For example, passenger and freight rail providers have implemented new security measures or increased the frequency or intensity of existing activities, such as performing risk assessments, conducting emergency drills, and developing security plans. The Federal Government has also taken steps to try to enhance rail security. In the wake of September 11, Congress created the Transportation Security Administration (TSA) and gave it responsibility for the security of all modes of transportation. As TSA worked to establish itself and improve the security of the aviation system during its first year of existence, the Department of Transportation's (DOT) modal administrations acted to enhance passenger and freight rail security. For example, the Federal Transit Administration provided grants for emergency drills to mass transit agencies and the Federal Railroad Administration assisted commuter railroads with the de-

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[1] U.S. General Accounting Office, *Transportation Security: Federal Action Needed to Help Address Security Challenges,* GAO–03–843 (Washington, D.C.: June 30, 2003); *Rail Safety and Security: Some Actions Already Taken to Enhance Rail Security, but Risk-based Plan Needed,* GAO–03–435 (Washington, D.C.: April 30, 2003); and *Mass Transit: Federal Action Could Help Transit Agencies Address Security Challenges,* GAO–03–263 (Washington, D.C.: December 13, 2002).

[2] GAO–03–435.

velopment of security plans. With the immediate crisis of meeting many aviation security deadlines behind it, TSA has been able to focus more on the security of all modes of transportation, including rail security. We reported in June 2003 that TSA was moving forward with efforts to secure the entire transportation system, such as developing standardized criticality, threat, and vulnerability assessment tools, and establishing security standards for all modes of transportation.

- Although actions have been taken to enhance passenger and freight security since September 11, the recent terrorist attack on a rail system in Spain naturally focuses our attention on what more could be done to secure the Nation's rail systems. In our previous work on transportation security, we identified future actions that the Federal Government could take to enhance security of individual transportation modes as well as the entire transportation system. Two recurring themes cut across our previous work in transportation security—the need for the Federal Government to utilize a risk management approach and improve coordination of security efforts. Using risk management principles can help guide Federal programs and responses to better prepare against terrorism and other threats and to better direct finite national resources to areas of highest priority. A risk management approach can help inform funding decisions for security improvements within the rail system and across modes. We reported in June 2003 that TSA planned to adopt a risk management approach for its efforts to enhance the security of the Nation's transportation system. In addition, improved coordination among rail stakeholders could help enhance security efforts across all modes, including passenger and freight rail systems. We reported in June 2003 that the roles and responsibilities of TSA and DOT in transportation security, including rail security, have yet to be clearly delineated, which creates the potential for duplicating or conflicting efforts as both entities work to enhance security. To clarify the roles and responsibilities of TSA and DOT in transportation security matters, we recommended that the Secretary of Transportation and the Secretary of Homeland Security use a mechanism, such as a memorandum of agreement, to clearly delineate their roles and responsibilities. To date, this recommendation has not been implemented.

Background

Passenger and freight rail services help move people and goods through the transportation system, which helps the economic well-being of the United States. Passenger rail services can take many forms. Some mass transit agencies, which can be public or private entities, provide rail services, such as commuter rail and heavy rail (e.g., subway) in cities across the United States.[3] Through these rail services, mass transit agencies serve a large part of the commuting population. For example, in the third quarter of 2003, commuter rail systems provided an average of 1.2 million passenger trips each weekday. The National Railroad Passenger Corporation (Amtrak) provides intercity passenger rail services in the United States. Amtrak operates a 22,000-mile network, primarily over freight railroad tracks, providing service to 46 states and the District of Columbia. In Fiscal Year 2002, Amtrak served 23.4 million passengers, or about 64,000 passengers per day. The nation's freight rail network carries 42 percent of domestic intercity freight (measured by ton miles) in 2001—everything from lumber to vegetables, coal to orange juice, grain to automobiles, and chemicals to scrap iron.

Prior to September 11, 2001, DOT—namely, the Federal Railroad Administration (FRA), Federal Transit Administration (FTA), and Research and Special Programs Administration (RSPA)—was the primary Federal entity involved in passenger and freight rail security matters. However, in response to the attacks on September 11, Congress passed the Aviation and Transportation Security Act (ATSA), which created TSA within DOT and defined its primary responsibility as ensuring security in all modes of transportation.[4] The act also gives TSA regulatory authority over all transportation modes. With the passage of the Homeland Security Act, TSA,

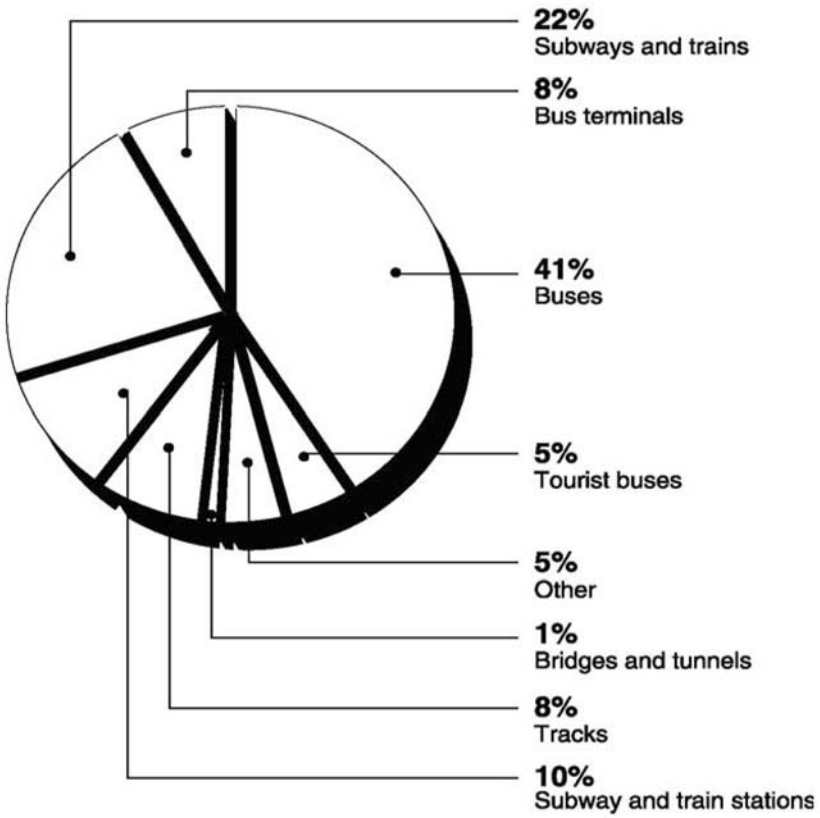
[3] Commuter rail is characterized by passenger trains operating on railroad tracks and providing regional service (*e.g.,* between a central city and adjacent suburbs). Heavy rail is an electric railway that can carry a heavy volume of traffic. Heavy rail is characterized by high speed and rapid acceleration, passenger rail cars operating singly or in multicar trains on fixed rails, separate rights-of-way from which all other vehicular and foot traffic is excluded, sophisticated signaling, and high-platform loading. Most subway systems are considered heavy rail.

[4] P.L. No. 107–71, 115 Stat. 597 (2001).

along with over 20 other agencies, was transferred to the new Department of Homeland Security (DHS).[5]

Throughout the world, rail systems have been the target of terrorist attacks. For example, the first large-scale terrorist use of a chemical weapon occurred in 1995 on the Tokyo subway system. In this attack, a terrorist group released sarin gas on a subway train, killing 11 people and injuring about 5,500. In addition, according to the Mineta Institute,[6] surface transportation systems were the target of more than 195 terrorist attacks from 1997 through 2000. (See fig. 1.)

Figure 1: Targets of Attacks on Public Surface Transportation Systems Worldwide, 1997 to 2000



Source: Based on information from the Mineta Transportation Institute.

Numerous Challenges Exist in Securing Rail Systems

Passenger and freight rail providers face significant challenges in improving security. Some security challenges are common to passenger and freight rail systems; others are unique to the type of rail system. Common challenges include the funding of security improvements, the interconnectivity of the rail system, and the number of stakeholders involved in rail security. The unique challenges include the openness of mass transit systems and the transport of hazardous materials by freight railroads.

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[5] P.L. No. 107–296, 116 Stat. 2135 (2002).

[6] The Mineta Transportation Institute was established by Congress as part of the Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA). The Mineta Institute focuses on international surface transportation policy issues as related to three primary responsibilities: research, education, and technology transfer.

Common Security Challenges Confront Passenger and Freight Rail Systems

A challenge that is common to both passenger and freight rail systems is the funding of security enhancements. Although some security improvements are inexpensive, such as removing trash cans from subway platforms, most require substantial funding. For example, as we reported in December 2002, one transit agency estimated that an intrusion alarm and closed circuit television system for only one of its portals would cost approximately $250,000—an amount equal to at least a quarter of the capital budgets of a majority of the transit agencies we surveyed.[7] The current economic environment makes this a difficult time for private industry or state and local governments to make additional security investments. As we noted in June 2003, the sluggish economy has further weakened the transportation industry's financial condition by decreasing ridership and revenues. Given the tight budget environment, state and local governments and transportation operators, such as transit agencies, must make difficult trade-offs between security investments and other needs, such as service expansion and equipment upgrades. Further exacerbating the problem of funding security improvements are the additional costs the passenger and freight rail providers incur when the Federal Government elevates the national threat condition. For example, Amtrak estimates that it spends an additional $500,000 per month for police overtime when the national threat condition is increased.

Another common challenge for both passenger and freight rail systems is the interconnectivity within the rail system and between the transportation sector and nearly every other sector of the economy. The passenger and freight rail systems are part of an intermodal transportation system—that is, passengers and freight can use multiple modes of transportation to reach a destination. For example, from its point of origin to its destination, a piece of freight, such as a shipping container, can move from ship to train to truck. The interconnective nature of the transportation system creates several security challenges. First, the effects of events directed at one mode of transportation can ripple throughout the entire system. For example, when the port workers in California, Oregon, and Washington went on strike in 2002, the railroads saw their intermodal traffic decline by almost 30 percent during the first week of the strike, compared with the year before. Second, the interconnecting modes can contaminate each other—that is, if a particular mode experiences a security breach, the breach could affect other modes. An example of this would be if a shipping container that held a weapon of mass destruction arrived at a U.S. port where it was placed on a train. In this case, although the original security breach occurred in the port, the rail or trucking industry would be affected as well. Thus, even if operators within one mode established high levels of security, they could be affected by the security efforts, or lack thereof, in the other modes. Third, intermodal facilities where passenger and freight rail systems connect and interact with other transportation modes—such as ports—are potential targets for attack because of the presence of passengers, freight, employees, and equipment at these facilities.

An additional common challenge for both passenger and rail systems is the number of stakeholders involved. Government agencies at the federal, state, and local levels and private companies share responsibility for rail security. For example, there were over 550 freight railroads operating in the United States in 2002. In addition, many passenger rail services, such as Amtrak and commuter rail, operate over tracks owned by freight railroads. For instance, over 95 percent of Amtrak's 22,000-mile network operates on freight railroad tracks.[8] The number of stakeholders involved in transportation security can lead to communication challenges, duplication, and conflicting guidance. As we have noted in past reports, coordination and consensus-building are critical to successful implementation of security efforts.[9] Transportation stakeholders can have inconsistent goals or interests, which can make consensus-building challenging. For example, from a safety perspective, trains that carry hazardous materials should be required to have placards that identify the contents of a train so that emergency personnel know how best to respond to an

[7] GAO–03–263.

[8] Freight railroads and commuter rail agencies also operate between Boston Massachusetts, and Washington, D.C., on the Northeast Corridor, which is primarily owned by Amtrak.

[9] U.S. General Accounting Office, Mass Transit: Challenges in Securing Transit Systems, GAO–02–1075T (Washington, D.C.: Sept. 18, 2002); U.S. General Accounting Office, *Homeland Security: Effective Intergovernmental Coordination Is Key to Success,* GAO–02–1011T (Washington, D.C.: Aug. 20, 2002); and, U.S. General Accounting Office, *National Preparedness: Integration of Federal, State, Local, and Private Sector Efforts Is Critical to an Effective National Strategy for Homeland Security,* GAO–02–621T (Washington, D.C.: Apr. 11, 2002).

incident. However, from a security perspective, identifying placards on vehicles that carry hazardous materials make them a potential target for attack.

Passenger and Freight Rail Systems Also Face Unique Challenges

In addition to the common security challenges that face both passenger and rail systems, there are some challenges that are unique to the type of rail system. In our past reports, we have discussed several of these unique challenges, including the openness of mass transit systems and the size of the freight rail network and the diversity of freight hauled.

According to mass transit officials and transit security experts, certain characteristics of mass transit systems make them inherently vulnerable to terrorist attacks and difficult to secure. By design, mass transit systems are open (*i.e.,* have multiple access points and, in some cases, no barriers) so that they can move large numbers of people quickly. In contrast, the aviation system is housed in closed and controlled locations with few entry points. The openness of mass transit systems can leave them vulnerable because transit officials cannot monitor or control who enters or leaves the systems. In addition, other characteristics of some transit systems—high ridership, expensive infrastructure, economic importance, and location (*e.g.,* large metropolitan areas or tourist destinations)—also make them attractive targets because of the potential for mass casualties and economic damage. Moreover, some of these same characteristics make mass transit systems difficult to secure. For example, the number of riders that pass through a mass transit system—especially during peak hours—make some security measures, such as metal detectors, impractical. In addition, the multiple access points along extended routes make the costs of securing each location prohibitive.

Further complicating transit security is the need for transit agencies to balance security concerns with accessibility, convenience, and affordability. Because transit riders often could choose another means of transportation, such as a personal automobile, transit agencies must compete for riders. To remain competitive, transit agencies must offer convenient, inexpensive, and quality service. Therefore, security measures that limit accessibility, cause delays, increase fares, or otherwise cause inconvenience could push people away from mass transit and back into their cars.

The size and diversity of the freight rail system make it difficult to adequately secure. The freight rail system's extensive infrastructure crisscrosses the Nation and extends beyond our borders to move millions of tons of freight each day (see fig. 2.). There are over 100,000 miles of rail in the United States. The extensiveness of the infrastructure creates an infinite number of targets for terrorists.

Figure 2: Map of Class I Rail Lines

Source: GAO.

Note: Class I railroads are the largest railroads, as defined by operating revenue. Class I railroads represent the majority of rail freight activity.

Protecting freight rail assets from attack is made more difficult because of the tremendous variety of freight hauled by railroads. For example, railroads carry freight as diverse as dry bulk (grain) and hazardous materials.[10] The transport of hazardous materials is of particular concern because serious incidents involving these materials have the potential to cause widespread disruption or injury. In 2001, over 83 million tons of hazardous materials were shipped by rail in the United States across the rail network, which extends through every major city as well as thousands of small communities. (Figure 3 is a photograph of a rail tanker car containing one of the many types of hazardous materials commonly transported by rail.) For our April 2003 report on rail security, we visited a number of local communities and interviewed Federal and private sector hazardous materials transportation experts.[11] A number of issues emerged from our work:

- the need for measures to better safeguard hazardous materials temporarily stored in rail cars while awaiting delivery to their ultimate destination—a practice commonly called "storage-in-transit,"
- the advisability of requiring companies to notify local communities of the type and quantities of materials stored in transit, and
- the appropriate amount of information rail companies should be required to provide local officials regarding hazardous material shipments that pass through their communities.

Figure 3: Hazardous Material Rail Tank Car

Source: Department of Homeland Security.

We recommended in April 2003 that DOT and DHS develop a plan that specifically addresses the security of the Nation's freight rail infrastructure.[12] This plan should build upon the rail industries' experience with rail infrastructure and the transportation of hazardous materials and establish time frames for implementing specific security actions necessary to protect hazardous material rail shipments. DHS has informed us that this plan is in progress.

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[10] Federal hazardous material transportation law defines a hazardous material as a substance or material that the Secretary of Transportation has determined is capable of posing an unreasonable risk to health, safety, and property when transported in commerce (49 U.S.C. §5103). It includes hazardous substances such as ammonia, hazardous wastes from chemical manufacturing processes, and elevated temperature materials such as molten aluminum.

[11] GAO–03–435.

[12] GAO–03–435.

Rail Stakeholders Have Taken Steps to Improve Security

Since September 11, passenger and freight rail providers have been working to strengthen security. Although security was a priority before September 11, the terrorist attacks elevated the importance and urgency of transportation security for passenger and rail providers. According to representatives from the Association of American Railroads, Amtrak, and transit agencies, passenger and freight rail providers have implemented new security measures or increased the frequency or intensity of existing activities, including:

- *Conducted vulnerability or risk assessments:* Many passenger and freight rail providers conducted assessments of their systems to identify potential vulnerabilities, critical infrastructure or assets, and corrective actions or needed security improvements. For example, the railroad industry conducted a risk assessment that identified over 1,300 critical assets and served as a foundation for the industry's security plan.
- *Increased emergency drills:* Many passenger rail providers have increased the frequency of emergency drills. For example, as of June 2003, Amtrak had conducted two full-scale emergency drills in New York City. The purpose of emergency drilling is to test emergency plans, identify problems, and develop corrective actions. Figure 4 is a photograph from an annual emergency drill conducted by the Washington Metropolitan Area Transit Authority.

Figure 4: Emergency Drill in Progress

At a planned emergency drill, firefighters practice rescuing passengers from a Washington Metropolitan Transit Authority subway car.

Source: GAO.

- *Developed or revised security plans:* Passenger and freight rail providers developed security plans or reviewed existing plans to determine what changes, if any, needed to be made. For example, the Association of American Railroads worked jointly with several chemical industry associations and consultants from a security firm to develop the rail industry's security management plan. The plan establishes four alert levels and describes a graduated series of actions to

prevent terrorist threats to railroad personnel and facilities that correspond to each alert level.

- *Provided additional training:* Many transit agencies have either participated in or conducted additional training on security or antiterrorism. For example, many transit agencies attended seminars conducted by FTA or by the American Public Transportation Association.

The Federal Government has also acted to enhance rail security. Prior to September 11, DOT modal administrations had primary responsibility for the security of the transportation system. In the wake of September 11, Congress created TSA and gave it responsibility for the security of all modes of transportation. In its first year of existence, TSA worked to establish its infrastructure and focused primarily on meeting the aviation security deadlines contained in ATSA. As TSA worked to establish itself and improve the security of the aviation system, DOT modal administrations, namely FRA, FTA, and RSPA, acted to enhance passenger and freight rail security (see tab. 1.). For example, FTA launched a multipart initiative for mass transit agencies that provided grants for emergency drills, offered free security training, conducted security assessments at 36 transit agencies, provided technical assistance, and invested in research and development. With the immediate crisis of meeting many aviation security deadlines behind it, TSA has been able to focus more on the security of all modes of transportation, including rail security. We reported in June 2003 that TSA was moving forward with efforts to secure the entire transportation system, such as developing standardized criticality, threat, and vulnerability assessment tools; and establishing security standards for all modes of transportation.[13]

Table 1.—Key Actions Taken by DOT Modal Administrations to Help Secure the Rail System, September 2001 to May 2003

DOT modal administration	Security efforts
Federal Railroad Administration	• Shared threat information with railroads and rail labor. • Reviewed Association of American Railroads' and Amtrak's security plans. • Assisted commuter railroads with their security plans. • Provided funding for security assessments of three commuter railroads, which were included in FTA's assessment efforts. • Reached out to international community for lessons learned in rail security.
Federal Transit Administration	• Awarded $3.4 million in grants to over 80 transit agencies for emergency response drills. • Offered free security training to transit agencies. • Conducted security assessments at the largest 36 transit agencies. • Provided technical assistance to 19 transit agencies on security and emergency plans and emergency response drills. • Increased funding for security research and development efforts.
Research and Special Programs Administration	• Established regulations for shippers and transporters of certain hazardous materials to develop and implement security plans and to require security awareness training for hazmat employees. • Developed hazardous materials transportation security awareness training for law enforcement, the industry, and the hazmat community. • Published a security advisory, which identifies measures that could enhance the security of the transport of hazardous materials. • Investigated the security risks associated with placarding hazardous materials, including whether removing placards from certain shipments improves shipment security, and whether alternative methods for communicating safety hazards could be deployed.

Source: GAO presentation of information provided by DOT modal administrations.

Risk Management and Coordination Key to Enhancing Security

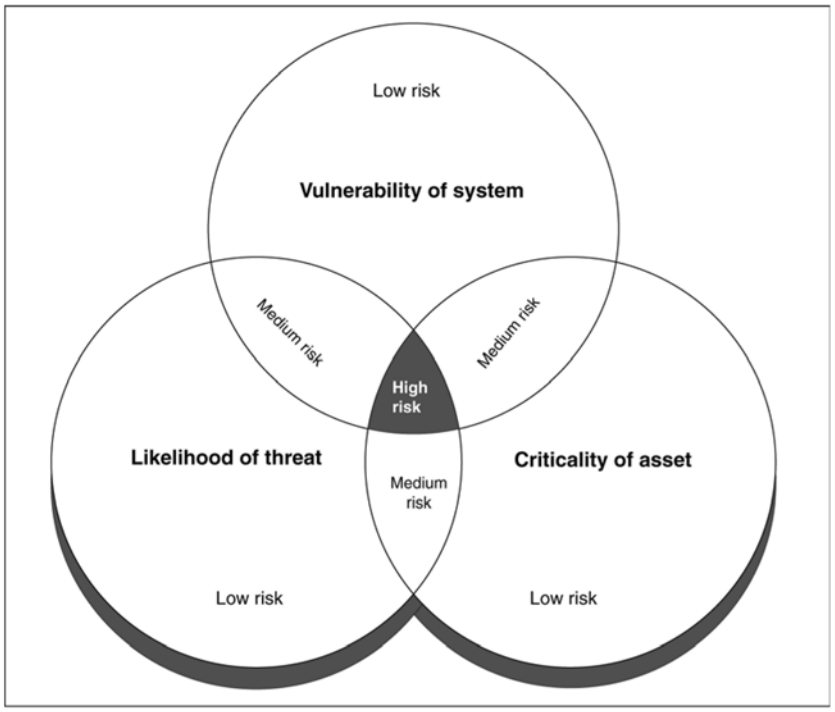
Although steps have been taken to enhance passenger and freight security since September 11, the recent terrorist attack on a rail system in Spain naturally focuses our attention on what more could be done to secure the Nation's rail systems. In our previous work on transportation security, we identified future actions that the Federal Government could take to enhance security of individual transportation modes as well as the entire transportation system. For example, in our December 2002 report on mass transit security, we recommended that the Secretary of Transportation seek a legislative change to give mass transit agencies more flexibility in

[13] GAO–03–843.

using Federal funds for security-related operating expenses, among other things.[14] Two recurring themes cut across our previous work in transportation security—the need for the Federal Government to utilize a risk management approach and the need for the Federal Government to improve coordination of security efforts.

Using risk management principles to guide decision-making is a good strategy, given the difficult trade-offs the Federal Government will likely have to make as it moves forward with its transportation security efforts. We have advocated using a risk management approach to guide Federal programs and responses to better prepare against terrorism and other threats and to better direct finite national resources to areas of highest priority.[15] As figure 5 illustrates, the highest priorities emerge where threats, vulnerabilities, and criticality overlap. For example, rail infrastructure that is determined to be a critical asset, vulnerable to attack, and a likely target would be at most risk and therefore would be a higher priority for funding compared with infrastructure that was only vulnerable to attack. The Federal Government is likely to be viewed as a source of funding for at least some rail security enhancements. These enhancements will join the growing list of security initiatives competing for Federal assistance. A risk management approach can help inform funding decisions for security improvements within the rail system and across modes.

Figure 5: Representation of Risk



Source: GAO.

A risk management approach entails a continuous process of managing, through a series of mitigating actions, the likelihood of an adverse event happening with a negative impact. Risk management encompasses "inherent" risk (*i.e.,* risk that would exist absent any mitigating action), as well as "residual" risk (*i.e.,* the risk

[14] GAO–03–263. DOT agreed to carefully consider our recommendations as it moved forward with its efforts to improve transit security.

[15] U.S. General Accounting Office, *Homeland Security: A Risk Management Approach Can Guide Preparedness Efforts,* GAO–02–208T (Washington, D.C.: October 31, 2001); and *Combating Terrorism: Threat and Risk Assessments Can Help Prioritize and Target Program Investments,* GAO/NSIAD–98–74 (Washington, D.C.: April 9, 1998).

that remains even after mitigating actions have been taken). Figure 6 depicts the risk management framework. Risk management principles acknowledge that while risk cannot be eliminated, enhancing protection from known or potential threats can help reduce it. (Appendix I provides a description of the key elements of the risk management approach.) We reported in June 2003 that TSA planned to adopt a risk management approach for its efforts to enhance the security of the Nation's transportation system. According to TSA officials, risk management principles will drive all decisions—from standard-setting, to funding priorities, to staffing.

Figure 6: Risk Management Framework

Source: GAO analysis.

Coordination is also a key action in meeting transportation security challenges. As we have noted in previous reports, coordination among all levels of the government and the private industry is critical to the success of security efforts. The lack of coordination can lead to such problems as duplication and/or conflicting efforts, gaps in preparedness, and confusion. Moreover, the lack of coordination can strain intergovernmental relationships, drain resources, and raise the potential for problems in responding to terrorism. The administration's *National Strategy for Homeland Security and the National Strategy for the Physical Protection of Critical Infrastructures and Key Assets* also emphasize the importance of and need for coordination in security efforts. In particular, the *National Strategy for the Physical Protection of Critical Infrastructures and Key Assets* notes that protecting critical infrastructure, such as the transportation system, "requires a unifying organization, a clear purpose, a common understanding of roles and responsibilities, accountability, and a set of well-understood coordinating processes."

We reported in June 2003 that the roles and responsibilities of TSA and DOT in transportation security, including rail security, have yet to be clearly delineated, which creates the potential for duplicating or conflicting efforts as both entities work to enhance security. Legislation has not defined TSA's role and responsibilities in securing all modes of transportation. ATSA does not specify TSA's role and responsibilities in securing the maritime and land transportation modes in detail as it does for aviation security. Instead, the act simply states that TSA is responsible for ensuring security in all modes of transportation. The Act also did not eliminate DOT modal administrations' existing statutory responsibilities for securing the dif-

ferent transportation modes. Moreover, recent legislation indicates that DOT still has security responsibilities. In particular, the Homeland Security Act of 2002 states that the Secretary of Transportation is responsible for the security as well as the safety of rail and the transport of hazardous materials by all modes.

To clarify the roles and responsibilities of TSA and DOT in transportation security matters, we recommended that the Secretary of Transportation and Secretary of Homeland Security use a mechanism, such as a memorandum of agreement to clearly delineate their roles and responsibilities. The Department of Homeland Security (DHS) and DOT disagreed with our recommendation, noting that DHS had the lead for the Administration in transportation security matters and that DHS and DOT were committed to broad and routine consultations. We continue to believe our recommendation is valid. A mechanism, such as a memorandum of agreement, would serve to clarify, delineate, and document the roles and responsibilities of each entity. This is especially important considering DOT responsibilities for transportation safety overlap with DHS' role in securing the transportation system. Moreover, recent pieces of legislation give DOT transportation security responsibilities for some activities, including the rail security. Consequently, the lack of clearly delineated roles and responsibilities could lead to duplication, confusion, and gaps in preparedness. A mechanism would also serve to hold each entity accountable for its transportation security responsibilities. Finally, it could serve as a vehicle to communicate the roles and responsibilities of each entity to transportation security stakeholders.

Observations

Securing the Nation's passenger and freight rail systems is a tremendous task. Many challenges must be overcome. Passenger and freight rail stakeholders have acted to enhance security, but more work is needed. As passenger and freight rail stakeholders, including the Federal Government, work to enhance security, it is important that efforts be coordinated. The lack of coordination could lead to duplication and confusion. More importantly, it could hamper the rail sector's ability to prepare for and respond to attacks. In addition, to ensure that finite resources are directed to the areas of highest priority, risk management principles should guide decision-making. Given budget pressures at all levels of government and the sluggish economy, difficult trade-offs will undoubtedly need to be made among competing claims for assistance. A risk management approach can help inform these difficult decisions.

This concludes our prepared statement. We would be pleased to respond to any questions you or other Members of the Committee may have.

APPENDIX I: KEY ELEMENTS OF A RISK MANAGEMENT APPROACH

Threat Assessment. Threat is defined as potential intent to cause harm or damage to an asset (*e.g.,* natural environment, people, man-made infrastructures, and activities and operations). A threat assessment identifies adverse events that can affect an entity and may be present at the global, national, or local level.

Criticality assessment. Criticality is defined as an asset's relative worth. A criticality assessment identifies and evaluates an entity's assets based on a variety of factors, including importance of a function and the significance of a system in terms of national security, economic activity, or public safety. Criticality assessments help to provide a basis for prioritizing protection relative to limited resources.

Vulnerability assessment. Vulnerability is defined as the inherent state or condition of an asset that can be exploited to cause harm. A vulnerability assessment identifies the extent that these inherent states may be exploited, relative to countermeasures that have been or could be deployed.

Risk Assessment. Risk assessment is a qualitative and/or quantitative determination of the likelihood of an adverse event occurring and the severity, or impact, of its consequences. It may include scenarios under which two or more risks interact, creating greater or lesser impacts, as well as the ranking of risky events.

Risk characterization. Risk characterization involves designating risk on a categorical scale (*e.g.,* low, medium, and high). Risk characterization provides input for deciding which areas are most suited to mitigate risk.

Mitigation Evaluation. Mitigation evaluation is the identification of mitigation alternatives to assess the effectiveness of the alternatives. The alternatives should be evaluated for their likely effect on risk and their cost.

Mitigation Selection. Mitigation selection involves a management decision on which mitigation alternatives should be implemented among alternatives, taking into account risk, costs, and the effectiveness of mitigation alternatives. Selection among mitigation alternatives should be based upon pre-considered criteria. There are as of yet no clearly preferred selection criteria, although potential factors might

include risk reduction, net benefits, equality of treatment, or other stated values. Mitigation selection does not necessarily involve prioritizing all resources to the highest risk area, but in attempting to balance overall risk and available resources.

Risk mitigation. Risk mitigation is the implementation of mitigating actions, depending upon an organization's chosen action posture (*i.e.,* the decision on what to do about overall risk). Specifically, risk mitigation may involve risk acceptance (taking no action), risk avoidance (taking actions to avoid activities that involve risk), risk reduction (taking actions to reduce the likelihood and/or impact of risk), and risk sharing (taking actions to reduce risk by sharing risk with other entities). As shown in figure 6, risk mitigation is best framed within an integrated systems approach that encompasses action in all organizational areas; including personnel, processes, technology, infrastructure, and governance. An integrated systems approach helps to ensure that taking action in one or more areas would not create unintended consequences in another area.

Monitoring and evaluation. Monitoring and evaluation is a continuous repetitive assessment process to keep risk management current and relevant. It should involve reassessing risk characterizations after mitigating efforts have been implemented. It also includes peer review, testing, and validation.

The CHAIRMAN. Thank you very much, Mr. Guerrero.

Secretary Hutchinson, GAO's concern here is the fact that the responsibilities of the Transportation Security Administration, the Department of Transportation in transportation security, including rail security, have yet to be clearly delineated, which creates a potential for duplicating or conflicting efforts.

They have been many recommendations, including more flexibility and use of risk management. But can you respond to that particular recommendation of theirs?

Mr. HUTCHINSON. Certainly. And I believe that the recommendation for an MOU has really been overtaken by the issuance of a Presidential Directive No. 7 that delineates the responsibilities on critical infrastructure, including transportation. So that sets the parameters for it. Within that context, there may be some narrowly targeted MOU's that may be adopted, such as TSA has one with the FAA, and we w look at others on an as-needed basis.

I would point out that we have a very good relationship. Whenever we set up a working group to look at additional steps that can be taken in rail and mass transit, the Department of Transportation at every level was very much a partner in that effort.

The CHAIRMAN. It is my understanding that you plan to develop a national transportation system security plan. What is the timetable for this initiative?

Mr. HUTCHINSON. That hopefully will be completed by the end of the year. Obviously, in every different mode there is a different timetable, but that is an ongoing effort, not just with our efforts at TSA, but also working with the IAIP Directorate.

The CHAIRMAN. I think we need that plan as quickly as possible, because I do not think—I think it is extremely difficult to determine whether there are requirements for additional funding and in what areas without the comprehensive plan. Would you agree with that, Mr. Guerrero?

Mr. GUERRERO. Absolutely.

The CHAIRMAN. So I hope you will give that a high priority.

Mr. Secretary, we all react to events. We would not be having this hearing if it were not for Madrid. Maybe we are all guilty of reacting rather than acting in anticipation of events, but I believe that a fundamental is a national transportation system security

plan and I hope we can—that you would give that a very high priority.

Mr. Jamison, how much do you estimate the FTA and the transit authorities have spent on security since September 11?

Mr. JAMISON. I do not have a total on exactly how much the industry spent, although I understand that the survey estimates a total of $1.7 billion. FTA has spent well over $25 million in response to September 11, in putting together a comprehensive program that I described in my testimony.

The CHAIRMAN. Mr. Rutter, you heard Senator Biden and Senator Carper's statement here. Understandably, they place a very high priority on the Northeast Corridor tunnels. In light of any terrorist attack, obviously we would like to maximize the damage and the publicity.

Do you sort of accept—do you accept that theory, that that is probably our greatest vulnerability, so therefore should have our highest funding priorities?

Mr. RUTTER. I think from a safety as well as a security standpoint, certainly this Committee has heard from our agency and from the Inspector General about the life safety implications of the New York tunnels.

The CHAIRMAN. And the Baltimore tunnel.

Mr. RUTTER. And Baltimore, New York being probably the higher number of people coming in and out of them. I think that one of the things we have been and will continue to do with Amtrak is look at their security needs from a strategic point of view. Certainly, should Congress want to fund those type of improvements——

The CHAIRMAN. I am asking your opinion. Do you feel that that is a proper—we cannot do everything at once. We are going to have to prioritize. Do you agree with that, that that should be a priority area to be addressed?

Mr. RUTTER. I think that is one of the things that we ought to do to enhance passenger rail security nationwide.

The CHAIRMAN. Mr. Guerrero?

Mr. GUERRERO. The transportation network, as you know, Mr. Chairman, is an interconnected network and the intermodal links in that network are critical. So I would agree that those are very important links.

The CHAIRMAN. And of course, very, very expensive when we are talking about overall funding.

So do you have any thoughts on that, Secretary Hutchinson?

Mr. HUTCHINSON. The specific point they were making was the investment in the Amtrak security, particularly the intermodal exchanges. Obviously, that has to have a priority for enhancement. I think as to where that comes from will be the debate this Committee will engage in.

I would emphasize that in the 2005 budget under the Urban Areas Security Initiative grants there will be $1.4 billion, which a doubling of that amount allows a great deal of flexibility. So we are looking to that fund to help cover some of these type of needs.

The CHAIRMAN. Well, I think that is going to be a very hard part of this plan when you come up with it, and that is why the plan is needed, is to where we feel the needs are the most immediate.

I could argue that Casa Grande, Arizona, is an area of great vulnerability, but I think that the argument that Senator Biden and Senator Carper were making bears some scrutiny and some perhaps serious consideration.

Senator Breaux—and I thank all the witnesses for being here today.

Senator BREAUX. As do I. Thank you all very much.

Mr. Hutchinson, you have so much on your plate with you and Secretary Ridge to look after. I was just wondering, does the Administration consider the potential of terrorist attacks of railroads to be less than on airlines or about the same or greater?

Mr. HUTCHINSON. Less. I mean, you look at the historic reporting, there has been more intelligence indicating that al-Qaeda continues to target the airline industry versus other modes of transportation. Certainly mass transit is included in that reporting, but I believe there is a higher level of threat in the aviation arena in terms of the reporting that we receive.

Senator BREAUX. It would seem to me, if I think like a terrorist, and saw that the United States had spent $4.5 billion improving airline security, hiring more Federal inspectors, incorporating the highest luggage and cargo screening technology, and sealing the doors of all aircraft, I would make a decision if I wanted to cause great havoc in this country not to make the airlines a target. I would go after the rail transportation system. I can walk on a train here at Union Station with two huge suitcases loaded with anhydrous ammonia like they used to blow up the Oklahoma building, no one would look at it, no one would do a background check. I could get on here in Washington or I could get on right up the road and detonate it somewhere between here and New York City.

So it seems to me that if you still think that airlines are a greater target after spending $4.5 billion, it would seem to me that a far greater target would be an area where we have spent only a relatively insignificant amount of money and that there are almost no restrictions or requirements whatsoever. Does that not make sense?

Mr. HUTCHINSON. There is certainly a logic that goes with that reasoning, and I would agree completely that we have a responsibility, not just to look at the aviation arena, even though that is where intelligence reporting continues to come and be pointed, but also the other modes of transportation and, not just that, but our other critical infrastructure, to make those safe every day.

So since we do sense that responsibility, that is why we have started, started long before the Madrid, but there is more that can be done and that is part of the initiative we indicated yesterday.

Senator BREAUX. Well, we spent, according to our figures, approximately $4.5 billion on aviation security, and everybody understands in general what we have done. There is probably a lot more we do not know about. But only about $65 million in comparison has been set aside for preparedness for the Nation's public transit systems.

It seems to me that difference is monumental. We have neglected this, it has become the stepchild of the transportation system, and until the Madrid tragedy I did not think a lot was happening.

Right after Madrid, the Administration reacted, but that was after the fact.

Let me just ask the question: From what you know, what anyone knows, of what happened in Madrid, what would have had to be in place from a security standpoint to prevent that from happening? If we do not learn from tragedies, then we run the risk of suffering another tragedy down the line. So, looking at what happened in Madrid, what type of system would have had to be in place to prevent that from happening?

Mr. HUTCHINSON. Of course, we are still getting the intelligence in. We will continue to evaluate that. But clearly, explosive detection capability is an important part of the equation.

Senator BREAUX. That is not in our plan anywhere that I have seen, is it?

Mr. HUTCHINSON. Absolutely, it is.

Senator BREAUX. For passengers getting on board trains?

Mr. HUTCHINSON. Well, it is part of the research to develop that technology, is an investment we are making, in addition to——

Senator BREAUX. Well, do we not already have that technology with regard to people getting on an airplane?

Mr. HUTCHINSON. It would be a totally different technology. We have to have the capability in a mass transit environment not to run everybody through a magnetometer or explosive detection equipment that is slow and cumbersome, but something that is mobile, that can work in a mass transit environment.

But in addition, the K–9 deployment teams that we are implementing, that is already in use out there, will be directed at that.

Senator BREAUX. It sounds like if I wanted to get into a business I would get into the dog business.

Mr. HUTCHINSON. It is not a bad business to get into.

I do not mean to imply that we have the capability to stop that today, but those are an area that we can work on to reduce the possibility of that.

In addition, when we look at our baseline security measures that need to be in place, we have to look at the receptacles in which a bag can be deposited, what are the security measures there, what are the surveillance cameras detecting, and are they being reviewed. These type of security measures are very helpful in that environment.

Senator BREAUX. Well, I am certainly not an expert, but it is a huge challenge. I am just pointing out that people get on the train between here and New York at several different locations; it is hard to set up that mechanism at every location, people getting on and off. But they are all getting on the same train. It would seem like the system could be on the train, and you would not have to have it at every station if it is on the train itself. So when people come onto the train, the detection mechanism would be part of the train system and not at each station or at every stop.

Mr. HUTCHINSON. Well, that is one of the purposes of the pilot project, is to look at what type of screening can take place in a mass transit environment.

Senator BREAUX. Well, I just hope we do not study it to death. It seems like every time Congress or the Administration comes up with another study, another assessment, or another risk assess-

ment, we never see it. I think we have a great track record on transporting hazardous materials. I do not think a single person lost their life in a train accident last year riding the train. This is a remarkable record.

But we have not been attacked by terrorists like they were in Madrid. As important as studies are, I would like to start seeing some things implemented, and I know that is your goal.

Mr. JAMISON. Senator Breaux, if I might I would like to respond to the Madrid question. I think we can learn some very important lessons from Madrid: one, that we must remain ever vigilant; and two, that we are on the right track. The information is still coming in from overseas, but what we do know, there are some significant differences on how Madrid is reacting to security versus what we are doing in the United States.

Number one, there is no security awareness training regime in Spain. We have trained over 46,000 transit employees to be the front line eyes and ears, to spot suspicious activity, that might be able to detect al-Qaeda techniques and other types of techniques that are using to case our Nation's systems.

They did not have any explosive detection capability in Spain from our understanding. Many of the agencies, especially the high-risk agencies, have deployed transit K–9 dogs that can do some type of bomb detection and have portable bomb detection type of devices.

They had no public awareness campaign in Spain. We have rolled out an aggressive transit watch public awareness campaign across the Nation and many transit agencies are constantly notifying their passengers to be ever vigilant and to detect this type of activity.

So there are several things that we can learn from Spain. I think we are very much on the right track.

Senator BREAUX. Thank you, Mr. Chairman.

The CHAIRMAN. Senator Allen.

Senator ALLEN. Thank you, Mr. Chairman.

Listening to the answers here to Chairman McCain and Senator Breaux, trying to assess what all the targets are and the vulnerabilities, you have to break them all down. Clear targets, aviation, maybe that is number one. Ports have different levels of concern: the ports in Virginia because of the big Navy presence; New Orleans because it is for the whole heartland of America as far as barge and shipping traffic; New York and New Jersey because of the population.

We know of target cities. We are right here in a target. We are in the bull's eye of a target in Washington, D.C. New York City is a target, Chicago, maybe other cities in different variations.

When you get into rail, you have three different areas. You have the mass transit, you have the passenger rail which has longer runs, and then you have freight. In the freight, the railroad companies of course do have their security, their own police. Then you have a gradation or variation on those that are having hazardous materials cars versus those that are non-hazardous materials.

So in all of these you have to make a judgment as to what is the most vulnerable and where the action ought to be taken. In my mind—and this is just listening to all of this—where you get a con-

vergence of priorities in the area of rail, it would strike me is you would care first and foremost about mass transit in target city areas, which would in my view be the Washington, D.C., area and the New York City area.

Now, recognizing what needs to be done, if you turned these railroads, the mass transit in this area or I think anywhere in this country, into something like airports, you are going to end up with more people driving. They are simply not going to go through such nightmares as we go through at airports, and aggravation, for mass transit, which is to get to and from work in a reasonable period of time.

The new technologies, the pilot programming, the dogs, the sensors, whatever you all may want to do, I think makes sense, but try to make it so people can get through, whether it is Penn Station, Union Station, or, heck, getting on at one of the Metro stops in the D.C. area.

Now, I would like to ask you, Secretary Hutchinson, how does the Department of Homeland Security intend to address already identified high priority critical infrastructure vulnerabilities in the capital-intensive sector, such as HAZMAT transit, in which the remedies sometimes fall beyond the scope of the existing assistance initiative at the Department of Homeland Security, such as the Office of Domestic Preparedness' urban area security initiative? If you could answer that and will you eliminate, at least support eliminating, the current prohibition on using the Office of Domestic Preparedness funds for the renovation or construction of facilities to provide transit agencies with greater flexibility in addressing their critical infrastructure needs?

Mr. HUTCHINSON. Well, I think it is certainly very important to have that flexibility there in the funding that goes. It is obviously important to have the assessment and that the money goes toward the security plans that are in place.

In reference to the HAZMAT concerns, on the routes for that in the capital region, that is something that IAIP has worked very aggressively on with the capital region here and they have identified and made progress in that area and have identified some solutions to address. We would be happy to give a more specific response to your question in writing.

Senator ALLEN. All right. Well, I look forward to receiving that.

Now, as far as the hazardous materials in the D.C. area, Senator Biden was talking about a tunnel built in the 1800s, in the late 1800s, in Baltimore. Regardless of the dates the tunnels are constructed, whether they actually dug these tunnels out in 1869 or 1969, the vulnerability of those tunnels is something that we ought to look at.

There are those—and you brought this up in answer to my first question about re-routing hazardous materials around Washington, D.C. What is your view of doing that? Any of you can answer this. It does not have to be just Secretary Hutchinson. If you rerouted the hazardous materials around Washington, D.C., what assets would be put in place to ensure the security of the materials on another route?

Mr. HUTCHINSON. Well, of course the security is layered in terms of the way the shipment is done, background checks of the drivers, that is an ongoing project.

Senator ALLEN. I am talking about rail, not trucks.

Mr. HUTCHINSON. In the rail environment, of course part of it is the safety measures that are in place for that. In terms of the security side of it, that is worked in conjunction with the Federal Railroad Administration.

Mr. RUTTER. I think one of the things that the Secretary said was that, frankly in response to interest on the part of the D.C. government about wanting to do something with the CSX rail line that comes into the District, our agency and constituent agencies of DHS have been working on and are in the process of a targeted vulnerability assessment and mitigation measures that are appropriate.

Certainly the District would like to see rerouting done. That may or may not be the best thing to do to provide additional security for the District and the kinds of material that come through there.

One of the reasons why we are so excited about that project is because one of the things we can do is take the lessons we have learned from D.C., which frankly is relatively simple because we are talking about one rail line rather than lots of them, and then maybe pilot that on another couple of cities that are more complicated, have multiple rail lines, more shipments coming through, and take that and use it as a template that can be offered to major metropolitan areas, for them to walk through the process of thinking about what do we have, what are the risks, how do we mitigate those, and provide a layer of additional protection nationwide, not just here in the District.

Mr. GUERRERO. Senator, it is precisely because of this, the question you just raised and other questions like it, that we recommended a year ago that the Department of Homeland Security and the Department of Transportation work on a risk-based plan for identifying these issues and working through strategies for how to deal with them. They are complex issues, not just the question of routing hazardous materials and rerouting those materials to avoid population centers, but also some of the issues I raised in my statement about storage of hazardous materials in transit and notification to communities.

All those were open questions and they remain open questions.

Senator ALLEN. Thank you, gentlemen. I look forward to continuing this dialogue on this subject. Thank you.

Thank you, Mr. Chairman.

The CHAIRMAN. Senator Lautenberg.

Senator LAUTENBERG. Thanks, Mr. Chairman.

To all of you, I am glad to hear your views. I am disturbed by the fact that in large measure what we have gotten, as Senator Breaux said, is agreements to have studies, and when we see that Secretary Ridge has deferred consideration of funding, providing any funding to transit systems, it is discouraging.

I would tell you, Mr. Chairman, I also had the tunnel experience. I was a Commissioner of the Port Authority of New York and New Jersey before I came to the Senate, and one of the first things I

did when I took that seat was to go through the tunnels that traverse the Hudson River between New York and New Jersey.

Not only was the envelope so tight that people who were working there had to actually get into niches along the way to protect themselves from being brought in by the force of the air there; and we found all kinds of difficult things. The electricity system was not the way it should be, but rather something in series. If one part of it went out, the whole went out. The fire doors were locked. It was a terrible situation.

Much of that has been cleared up. But we send every day over 100,000 people across that river and we just are running out of capacity. When we think about what happened on 9/11, the only available sensible transportation system was rail. That is how the delegation came up from Washington to New York. The aviation system was totally shut down.

So I hope, Mr. Chairman, that when we think of writing legislation that we make sure that we include some of the funding for another, a third tunnel there, just as we would looking at the Baltimore problem that Senator Biden described.

The thing that I want to ask: Mr. Hutchinson, why has not the administration requested any funding specifically for Amtrak rail security? We carry 24 million passengers a year. We cannot ask them to provide funds out of their losses which they sustain each and every year as to passenger rail services across the globe.

Why has it not been requested in any of the budgets that we see?

Mr. HUTCHINSON. Well, there may need to be a budgetary fix. If some of the urban area grant money would be used for Amtrak security funding, I think we are certainly open to that discussion. Whenever you look at Amtrak and our funding mechanisms, it is $1.4 billion in the 2005 budget through those security grants.

In addition, the Department of Transportation of course provided, I believe it was, $100 million for the superstructure there at Penn Station, which serves Amtrak as well. So there are additional needs, but there might have to be a legislative fix to help on that funding flow.

Senator LAUTENBERG. I think one of the hardest things for people to understand is, now that we have seen what happened in Madrid and what happened in Japan when that attack on the subway system took place, is how in the world we can commit $88 billion to reconstruct Iraq—and I got back from there last week and I believe we have to spend money there, I believe we have to do it—why we cannot find money to provide those millions of passengers who use the rail systems each and every year, every week practically, some funding to start to provide sensible security arrangements for them.

It just, it is not fair to our constituents or the people who are required to use rail service. So I would urge that you help us with that legislative direction that you described.

I would ask something else. We had hearings here, Mr. Chairman, last year in April, so that is just about a year ago. Questions that were asked related to Amtrak and freight rail security problems, and the questions were simple: What has the Department done to improve the security of rail transportation for both intercity travel and commuter service?

Frankly, we are just now getting answers. The answers came in connection with this hearing, Mr. Chairman, and that provoked a response from the transportation, the needs. Why does it take so long to get an answer to questions that are put before the witnesses, when before you and your Department, why can we not get a quicker response. The record was held open, it said to submit the question in writing. We did all of those things and heard nothing in response.

Mr. HUTCHINSON. We certainly want to be responsive to your questions to Congress and am delighted to work on the speed of those. But we are here today to answer any questions.

Senator LAUTENBERG. Well, the questions that relate to the almost lackadaisical response to what has been an urgent problem. It has become highlighted as a result of the situation in Madrid. Can Madrid happen in this country?

Mr. HUTCHINSON. Obviously, we would never guarantee that we do not have vulnerabilities or that we are free from a terrorist incident in this country. I believe we have more protective measures that are in place than what we see in some of the rail transits there in Spain.

But if I might, sir, the contrast—Senator Breaux mentioned $65 million in contrast to the billions that we are spending on the aviation arena, and there is a difference there in funding levels, I will concede that point. But I do not think $65 million paints the picture whenever we have given $26 million to New York City transit, $5 million to Chicago transit, and on down that adds up to $115 million to the different transit authorities over and above the amounts invested in the Marine and Land Division at TSA.

But also, we have our Directorate of Infrastructure Protection that works on these issues. We have our science and technology that is investing really hundreds of millions of dollars in technologies that will be applicable to the mass transit arena, as well as what Department of Transportation is doing and Customs and Border Protection.

So there is a disparity, but we are doing certainly a lot more than simply what is reflected in that one amount.

STATEMENT OF HON. KAY BAILEY HUTCHISON,
U.S. SENATOR FROM TEXAS

Senator HUTCHISON. [presiding]. Senator Lautenberg.

Senator LAUTENBERG. Thank you very much, Madam Chairman.

Senator HUTCHISON. Thank you.

Senator Boxer.

Senator BOXER. Thank you very much, Madam Chairman.

I just want to thank all of you. This has been a good hearing. I thank my colleagues very much.

Mr. Hutchinson, when I quoted I was quoting you, and so I wanted to give you a chance to react to the way I read your quotes. You said after Madrid: "It is very important we do not simply react to an incident that happens anywhere in the world," and went on to say the Administration was not seeking more funding for train security. And then I said, "An aircraft can be used as a weapon; a train cannot be hurled through the air in the same fashion," something I think we all understand.

But when I read your testimony, in the first page you mention Madrid five times. So maybe I am assuming that this was not an accurate quote or it was taken out of context, because the war on terror, as we all know, is a global war and things that happen all over the world must be looked at, because terrorism is all over the world.

Mr. HUTCHINSON. Absolutely, and thank you, Senator, for giving me a chance to comment on that. The quotes are accurate and I believe it is important that we do not simply react to incidents. What I mean by that is that we ought to invest in security based upon our intelligence, based upon what this Committee has been emphasizing, which is the assessments that are made on vulnerabilities.

Certainly there is a level of reaction in the sense of reviewing what we are doing, what more can we do, what lessons can we learn. So I do not want to diminish in any way the sensitivity toward the tragedy that happened there or the lessons that we can learn from it.

Senator BOXER. Well, if you are not backing off your quote, I just want to again say I found it very disturbing. So we just do not agree on that point. I think that, looking at—where is that freight line chart, if I could see that again. If you just take a look at the target of opportunity here and the fact that, as Senator Lautenberg has pointed out, you could set charges all over the rail system, you are talking about something that, whether a train can be hurled through the air into a building or not is not the point.

Do you know about the nuclear waste dump at Yucca Mountain? Are you familiar with it?

Mr. HUTCHINSON. Yes, I am.

Senator BOXER. Do you know how many trips by rail we are going to have over the life of the project carrying that nuclear waste?

Mr. HUTCHINSON. I am not—I am familiar with it. I addressed that issue in Congress, also obviously to a certain extent at Homeland Security, but I do not know that level of detail.

Senator BOXER. Well, I want to tell you that it is 18,000 trips, and I need you to think about this. That dump is going to open in a few years. And we are talking about not, quote unquote, "low level waste," which is dangerous enough. We are talking about serious heavy waste that is potentially disastrous if there were to be an accident.

So therefore, if we are not going to take Madrid as a signal, let us look here in our country and see what is coming. 18,000 shipments of the most dangerous nuclear wastes known to humankind, 18,000 trips by rail. So I would like to put that on your agenda.

Now, you said you do not need new money, but you are taking all these steps. Where are you taking the money from?

Mr. HUTCHINSON. Well, in reference to the K–9 teams that we are deploying, Federal Protective Service has 50 of those teams. We have five in training. As we deploy those and have those available for deployment, we will look to see whether that needs to be enhanced.

In reference to the research and development, that is because we have in the science and technology $500 million for research in this

area, so we are utilizing some of that for the enhanced explosives detection capabilities. Whenever you look at our pilot project for screening, that is within the existing budget of TSA. We need to deploy that very quickly.

Senator BOXER. So what is the next cost? What is the new level of expenditure to meet this threat? You are talking about putting into place right away these teams of dogs, etcetera. What is the cost of all that?

Mr. HUTCHINSON. Those items that I mentioned plus the security directives and the baseline is within existing budget. Where the new money is would be in the——

Senator BOXER. So wait a minute. So you have a surplus in your budget that you did not need and you are using it for this new program? Is that what you are telling us, your budget was fat and you are taking this extra money that you were not using in any other place and you are using it for this?

Mr. HUTCHINSON. I do not think that is a correct reflection of what I just described——

Senator BOXER. Well, where are you getting it from?

Mr. HUTCHINSON.—as to our initiative.

Senator BOXER. You came to us with a budget. You said, we need this for rail, we need this for air marshals. We have all been involved in this budget, a tremendous amount involved in it, because, speaking from my point of view, every one of those planes was going to my State and now I am looking at Amtrak with the second busiest Amtrak in the country.

So I am just curious. You are saying you do not need money. You have got to be getting it from somewhere, and you just keep repeating what you are doing. Where are you getting the money from to pay for this?

Mr. HUTCHINSON. Let me see if I can address that——

Senator HUTCHISON. Senator Boxer, let us let him answer the question.

Senator BOXER. Well, I am trying to, but I know what a filibuster is when I see one. I am trying to find out where you are cutting it from.

Senator HUTCHISON. He is—just let him have a chance to at least respond, and then you.

Mr. HUTCHINSON. There is two aspects to this. One is the Federal leadership role which I have described. The security——

Senator BOXER. I am sorry?

Mr. HUTCHINSON. Federal leadership role, which would be in defining the baseline of security and having the capability of threat response, research and development.

The other aspect is the funding of the money. The grant money that would be available for the urban areas will more than double in the President's 2005 budget to $1.4 billion. That is available for mass transit and the Secretary has indicated that he will earmark some of that money so it will specifically go to mass transit and rail security. I think that is an appropriate balance.

Senator BOXER. As opposed to? As opposed to where?

Mr. HUTCHINSON. Well, it goes directly to the urban areas for their discretion and flexibility. The fact is the last time that the money went to the urban areas the cities or the governmental au-

thorities did not put much in mass transit. We are saying that has to be a higher priority. So they did not put it there, so we are going to earmark some of that to make sure it goes to mass transit, as we did the $115 million.

Senator BOXER. Thank you, and I will just ask you one more question.

Senator HUTCHISON. Senator Boxer——

Senator BOXER. These new things that you are doing, how much do they cost?

Senator HUTCHISON.—your time is up. Senator Boxer, your time is up.

Senator BOXER. This is important.

Senator HUTCHISON. I am going to let you finish this thought.

Senator BOXER. Everybody else went over time. This is my last question.

Senator HUTCHISON. This is your last question.

Senator BOXER. Can you just tell me how much this new program, this new program to respond to this threat, how much are you now going to spend on this as a result of Madrid?

Mr. HUTCHINSON. The initiatives that I outlined that reflect the Federal leadership role, in threat response, in research and development, in the security lines——

Senator BOXER. How much? How much?

Mr. HUTCHINSON.—there should be no additional money except for the science and technology investment. The additional money will come in the urban area security grants——

Senator BOXER. How much?

Mr. HUTCHINSON.—that has more than doubled in the President's budget to $1.4 billion.

Senator BOXER. You are spending a new $1.4 billion——

Senator HUTCHISON. Mr. Secretary.

Senator BOXER.—on rail security, is that what you said?

Senator HUTCHISON. Mr. Secretary.

Senator BOXER. I am so confused.

Senator HUTCHISON. Mr. Secretary, I would like to talk about the disparity between the Northeast Corridor and the rest of the country in Amtrak. At this point, from my figures, Amtrak received $100 million to secure the New York tunnels, but spent a mere $5 million on the rest of the nationwide network.

Now, I certainly understand that New York is a priority, and I think there are other priorities on the Northeast Corridor. However, I think that disparity is pretty stark, and these trains are going through Chicago, they are going through Dallas, they are going through Houston. These are huge metropolitan areas.

Do you think that that allocation is going to stand or are we going to try to show some concern for these other metropolitan areas, not to mention the rural areas that they go through?

Mr. HUTCHINSON. I think your point is well taken. Obviously, whenever you look at the Amtrak security that needs to be put in place, it is a combination of what they do for their own rail systems—I think they put that one particular section in New York City as a priority. We have to look at other security around the country and we are doing that through the infrastructure protection. We went to a higher alert level. We did deploy more security

measures. But I think that we can balance that more effectively, from what you are saying.

Senator HUTCHISON. Let me just bring up another point, and this goes into the freight area and the issue of port security. Many of us are very concerned. Senator Breaux actually had great hearings that went on the ports really along the southern border of our country, and we found that port security is probably the most in need of attention. We have a situation in Houston where you have a major port, a major international port, also a major chemical complex, and a huge railroad meeting place where all the railroads come in to put the freight on the ships.

I would like to ask you if port security is on your radar screen, particularly in this context, where you have rail lines that go into the ports. I am sure that is also the case in the New Orleans port and probably all the ports in our country. Do you give a special emphasis for rail areas at ports and are you taking any special precautions there?

Mr. HUTCHINSON. Each port has to do the assessments which have been completed, and so that would be a part of the evaluation of vulnerabilities. Then I think it was last year I think $165 million went out for port security grants that did include that concern you expressed on the rail intermodal connection at those ports, and that would be a part of that.

I would have to look specifically as to how much went in that arena.

Senator HUTCHISON. Are you concerned about our port situation, particularly with rail and port together?

Mr. HUTCHINSON. Yes. I think that our ports as a whole, we have to be able to enhance the security measures there. That is a combination of what is done by the private sector and what we invest, and we need to continue to build on that.

Senator HUTCHISON. Do you think the industry is stepping up to the plate in the area of adding to its security and infrastructure—I'm talking freight industry now—because there should be some allocation of responsibility here. I do not think they are stepping up to the plate as much as we would like for them to. I would like to know your opinion of that and if you think there is some fair allocation that industry should bear in this whole security area.

Mr. HUTCHINSON. You know, it is hard to just come up with percentages, but clearly we expect the private sector to invest in it. When it comes to the freight rail sector, I know that they have invested in security, and I think that there is certainly more that needs to be done. I think that they have invested——

Senator HUTCHISON. Are you satisfied with the amount that the freight industry has done on its own?

Mr. HUTCHINSON. I will withhold judgment at this point. More needs to be done, but I think they have certainly been a very willing participant up to this point.

Senator HUTCHISON. Thank you, Mr. Chairman—thank you. I am the Chairman.

[Laughter.]

Senator HUTCHISON. Senator Cantwell. McCain's ghost is standing behind me.

STATEMENT OF HON. MARIA CANTWELL,
U.S. SENATOR FROM WASHINGTON

Senator CANTWELL. Thank you, Madam Chairman.

Secretary Hutchinson, thank you for your attention to the northern border. We appreciate that very much.

I had a question. I cannot remember the timing of your appointment and the formation of a freight protocol with Canada. I think that happened roughly about the same time, but that is within your jurisdiction. And I wondered, given the situation that we have in only making our border secure as the cooperation with our neighbors, do you believe that we need to have a passenger protocol with Canada established to make sure that we are coordinating screening and various processes with Canada?

Mr. HUTCHINSON. Yes, I think we need to do more in that arena. If you are looking at rail passengers, first, we are hoping to get advanced information on those passengers so that we can review those before they come into the United States. If you are looking in terms of the auto passengers that come across the borders, we are continuing to build on our cooperation with Canada. You are speaking of the freight area?

Senator CANTWELL. I am saying we have a freight transportation protocol, because obviously the point of origin of cargo and goods coming into the United States, we wanted to have better security. Obviously, I think the same would apply for passenger rail, that you would want to establish some sort of U.S.-Canadian protocol on how we treat security and screening at those various points of origin.

Mr. HUTCHINSON. That is exactly correct. We are first addressing it in a cooperative fashion, but we are also mandating, working to get the information on the passengers that come in in advance of departure so that we can vet those names. In the inspection process, we are continuing to look at more opportunities for partnering with Canada in that regard.

Senator CANTWELL. So that would be establishing a protocol? I mean, I would encourage the Department and the agency to establish a protocol, given the case in Washington where we had somebody load up with explosives and go to the U.S.-Canadian border and try to come over through Port Angelis. It was only the great work of a Customs, actually Immigration and Customs working in tandem, that was able to find a carload of explosives on the way to either the Space Needle or LAX.

So getting that porous situation basically bolstered by a protocol on cooperation I think would be very helpful.

Mr. HUTCHINSON. I agree completely and that is our intention.

Senator CANTWELL. Great.

The second question: Do you think that pilot programs in and of themselves are a deterrent? Do they create a deterrent atmosphere in the sense that people are aware of the pilots and what is going on?

Mr. HUTCHINSON. In a limited way. I think if you are looking at the mass transit, the rail passenger pilots, anything that we are investing in security that is visible is helpful as a deterrent, yes. But when you are looking at a massive United States system and we are piloting in one area, it probably has limited impact.

But the greatest ability is whenever we develop that capability and we see a threat that we know we have the expertise that we can respond with that implementation of enhanced screening.

Senator CANTWELL. So you actually think it is somewhat of a deterrent, I guess is what you are saying?

Mr. HUTCHINSON. It depends upon the pilot and the nature of it. I think that the fact that this would be visible certainly is a deterrent in that area, absolutely.

Senator CANTWELL. Well, given the Madrid situation and given that we are dealing with explosives and backpacks—and nothing against the Northwest because they are great people, but we carry backpacks like some people carry briefcases. So our trains are filled with people with backpacks. So why not establish one of the pilot programs in the Northwest—or why not have a couple of these pilot programs as a way to establish the different use and activities that are going on within those regions?

Mr. HUTCHINSON. We will continue to look at appropriate locations for that, and we might potentially be able to expand that. I think when you look at deterrence, the greatest deterrent is the use of K–9's that actually go through a mass population center, a station, and when people are traveling and see that presence I think that would certainly discourage illegal behavior and explosives particularly.

Senator CANTWELL. I am glad you brought up that point because I am a little confused. I want to understand exactly how this works. Obviously, we are subjected to this every day on a daily basis as we come in and out of the Capitol. But a lot of people get on the Amtrak system, throw their backpacks in the overhead compartment, and leave them there. Are we saying that K–9's walking through the corridor of a train are able to detect whether a backpack in an overhead bin has explosives in it?

Mr. HUTCHINSON. Well, they might have to get a little bit closer in proximity. But I think that would have some benefit because they would be sniffing trash receptacles and other places where it could be deposited to accomplish damage. But also prior to entry onto the station, as the population is milling in the waiting area before embarking on the train, their presence there would have not only a deterrent effect, but a real detection capability. That is why they are used very effectively already.

Mr. JAMISON. Senator, I would like to also add that when you take into account many of the transit agencies which carry substantially more passengers than Amtrak have adopted unattended bag policies and called the bomb squad and appropriate officials when they have an unattended bag, which allows them to focus on that detection capability.

Senator CANTWELL. Well, I am actually a big fan of the K–9 units because of our porous northern border, where we have been unable to have significant manpower, and we have used them successfully in parts of Okanogan County where we do not have a lot of huge population transportation, but we have a lot of people trying to sneak through. Somebody just found I think it was a half a million dollars in a backpack from a drug deal that had gone wrong along that area.

So those K–9's have been effective. I guess I would ask you to consider a pilot in this region and consider the challenge of people getting on and off the system at various points. So you would either have to have some sort of screening of that backpack or cargo of the individual or a K- 9 unit at every stop, because literally it is that porous, where anybody can get on the system.

Mr. HUTCHINSON. Absolutely. It is not an optimum solution to have that type of inspection for people who expect to get on an open system. So it would be, hopefully, only deployed on a limited basis in response to a particular threat. But we need to have that experience.

Senator CANTWELL. I see my time has expired.

Senator HUTCHISON. I want to thank all of you for coming. Mr. Secretary, you certainly took the majority of the questions, and I understand we are going to have a port security hearing tomorrow at which you will be in attendance. So we appreciate that because these two dovetail and we must address them, I think, a little more, in a more comprehensive way. I think this is a vulnerability that we have and I would like to see us make it a higher priority.

Mr. HUTCHINSON. Thank you, Senator.

Senator HUTCHISON. Thank you all very much, and I would like to call the second panel. The second panel is: Dr. Jack Riley, the Director of RAND Public Safety and Justice, from the RAND Corporation; Mr. Ed Hamberger, President and Chief Executive Officer of the Association of American Railroads; Mr. William Millar, President of the American Public Transportation Association; and Mr. John O'Connor, Chief of Patrol, National Railroad Passenger Corporation.

[Pause.]

Senator HUTCHISON. We certainly thank all of you for attending. You will provide a little different perspective from the ground and we appreciate that very much.

I will start to my left, with Mr. Riley.

STATEMENT OF JACK RILEY, PH.D., DIRECTOR OF PUBLIC SAFETY AND JUSTICE, RAND CORPORATION

Dr. RILEY. Thank you, Madam Chairwoman. I have provided written testimony that I ask be included in the record.

Senator HUTCHISON. Without objection.

Dr. RILEY. In that event, I will keep my remarks brief. I will start with a quick summary of what we know about rail terrorism. The RAND terrorism data base, which chronicles and details more than 16,000 terrorist incidents across the world, would rank the Madrid attacks among the most deadly and the most sophisticated that we have ever encountered. That said, however, rail attacks are generally in the mid-range in terms of attacks on public transportation and surface transportation systems. They are more frequent than attacks on air transportation systems, but they are less frequent and generally less deadly than those that occur against bus transportation.

In recent years there has been no discernible trend, no increase or decrease that we can note, in terms of rail attacks. Generally, the rail attacks that exist out there are, particularly in places like

Spain, the Chechen Republic, and other places, are tied to separatist conflicts and long, ongoing conflicts between ethnic parties.

Like air and bus transportation, rail transportation has several unique vulnerabilities that make it attractive to terrorists. I think the two most important, one each on the passenger and freight side: on the passenger side, rail facilities are by their very nature open, they have very high passenger densities, and they could be attacked with something as simple as a backpack-sized bomb, as we saw in Madrid.

In contrast, freight rail is responsible for moving approximately 40 percent of our intercity freight and half of the Nation's hazardous materials, often through densely populated urban areas. Thus these are potentially important and visible targets to terrorists in this country.

What has been done to secure our rail transportation? Others will testify in detail. I will recount some of the more important steps that I have seen taken. Prior to September 1–September 11 and the terrorist attacks of 2001, the FRA had already required passenger rail systems to have drills, to have emergency plans in place, and to be ready for serious incidents. This is in part a function of the number of passenger rail accidents that occur, natural hazards, things like floods, hurricanes, and earthquakes, power outages, and so forth. But there was a fair amount that was in place even prior to September 11, 2001.

These evacuation skills and this preparedness were very useful in the collapse of the World Trade Center because the PATH train network was directly responsible for evacuating more than 5,000 people from the basement of the World Trade Center prior to its collapse and probably preventing many additional casualties.

Since September 11, 2001, passenger systems have conducted further drills, testing, preparation for emergencies. Many systems, as you have heard, have initiated suspicious package programs and many systems are experimenting with systems to detect chemical, biological, and other weapons.

Freight rail initiatives again you will hear in detail. I will not go into much, but they have included: strengthened coordination with the Department of Homeland Security; improved oversight over operations, equipment; and increased surveillance.

There is more that we can do. Perhaps the best lesson and the best set of incidents that we could learn from prior to the Madrid bombings were the sustained IRA attacks on the United Kingdom's rail system. What we learned from those attacks was the importance of securing access to rail facilities, improving surveillance, integrating blast-resistant trash bins, and training of personnel and passengers to be the eyes and ears and be a part of security.

Many of these lessons can be adapted both to U.S. passenger rail systems and to the freight rail system. Further information is needed on how much should be spent on rail security relative to the security of other potential targets.

No system of security will be perfect, but the rail system decisionmaking process in the context of security is very decentralized. Federal policy on rail terrorism should really define a Federal role in preventing or mitigating such attacks and define the roles and responsibilities of government agencies, transportation companies,

and system users in preventing attacks and responding to their consequences.

In short, we need the threat and vulnerability assessments that have been called for and we need the assessments to generate the corresponding list of priorities.

I would be happy to answer any questions.

[The prepared statement of Dr. Riley follows:]

PREPARED STATEMENT OF JACK RILEY,[1] DIRECTOR, PUBLIC SAFETY AND JUSTICE, RAND CORPORATION

Introduction

Chairman McCain, Ranking Member Hollings, and members of the Committee, I am very pleased to be here today to testify about our state of knowledge on terrorism and rail security. As the recent events in Madrid, Spain demonstrate, terrorist acts against our rail system can have deadly consequences.

My testimony today is built on the RAND Corporation's long involvement in analyzing the dynamics of terrorism. Since the 1970s, RAND has maintained databases of terrorism incidents now containing information on more than 16,000 terrorist attacks. Our contributions to terrorism studies prior to the attacks of September 11 included analysis of the rise of extremist religious motivations in terrorist attacks, the first independent and empirical assessment of national preparedness for domestic terrorism, and support for the Gilmore Commission (formally, the Advisory Panel to Assess Domestic Response Capabilities for Terrorism Involving Weapons of Mass Destruction). Since the attacks of September 11, RAND has advised on terrorism risk at the highest levels of the public and private sectors, including our support for the Department of Homeland Security's development of the National Response Plan/National Incident Management System, our modeling of national smallpox vaccination strategies, and our development of a Center for Terrorism Risk Management Policy that conducts policy analyses on complicated aspects of terrorism risk, liability and compensation.

Prior to the recent Madrid and Chechen terrorist train bombings, RAND also initiated terrorism risk reduction studies for the Federal Railroad Administration (FRA) and for Amtrak. Because this work is still in progress, my comments today will focus on only published RAND research results and information from other sources.

Terrorist Attacks on Rail Transportation Targets

Between 1998 and 2003, there were approximately 181 attacks on trains and related rail targets such as depots, ticket stations and rail bridges worldwide.[2] Attacks on light rail systems and subway systems are included in these estimates. Attacks have occurred in all comers of the globe, including Venezuela, Colombia, India, Pakistan, Spain and the United Kingdom. These attacks resulted in an estimated 431 deaths and several thousand injuries. Bombs were the most frequently used weapon in these attacks, although firearms and arson have also been used. Table 1 summarizes terrorist incidents and deaths from attacks on rail facilities for 1998–2003.

Table 1.—Terrorist Rail Attacks, 1998–2003

Year	Incidents	Deaths	Notable incident
1998	48	92	Train bomb in Pakistan killed 23.
1999	5	2	Two die in Ethiopia; only fatal rail attack of year.
2000	13	0	No rail deaths from terrorist acts.
2001	41	275	Angolan rebels kill 252 with bomb, gunfire.

[1] The opinions and conclusions expressed in this testimony are the author's alone and should not be interpreted as representing those of RAND or any of the sponsors of its research. This product is part of the RAND Corporation testimony series. RAND testimonies record testimony presented by RAND associates to federal, state, or local legislative committees; government-appointed commissions and panels; and private review and oversight bodies. The RAND Corporation is a nonprofit research organization providing objective analysis and effective solutions that address the challenges facing the public and private sectors around the world. RAND's publications do not necessarily reflect the opinions of its research clients and sponsors.

[2] These estimates are taken from the RAND–MIPT Terrorism Incident Database, which covers terrorist incidents from 1998 to the present. The database can be accessed at: *http://db.mipt.org/mipt_rand.cfm.* Given the short time available to prepare this testimony, the figures used from the database should not be regarded as precise counts.

Table 1.—Terrorist Rail Attacks, 1998–2003—Continued

Year	Incidents	Deaths	Notable incident
2002	60	41	Track sabotage kills 20 in India.
2003	14	21	Bomb in Mumbai, India commuter train kills 10.
TOTAL	181	431	

The recent attack in Madrid, thought to be the work of al Qaeda sympathizers, ranks among the most sophisticated rail terrorist attacks, with its near simultaneous detonation of 10 charges. In terms of overall casualties, it would rank second to an August 2001 attack by Angolan separatist rebels who, using a combination of remote detonation of explosives and directed gunfire, killed 252 rail passengers. Such attacks are outliers among those of recent years. Aside from the 2001 Angola attack, for example, Table 1 shows that the average rail attack between 1998 and 2003 resulted, on average, in about one death per incident.

Rail in Comparison to Other Transportation Targets

Rail attacks are more numerous and deadly than those on airports and airplanes, but have not been as numerous or resulted in as many deaths as those on buses and related infrastructure such as ticket offices and depots. Table 2 summarizes terrorist attacks on other transportation targets between 1998 and 2003. Buses and related infrastructure such as ticket offices and depots have been attacked by terrorists half again as often as trains and their related infrastructure, with about 1.6 deaths per incident. A large proportion of the bus incidents involve sniper fire at Israeli vehicles moving through the Occupied Territories. Spain, Colombia, India and Pakistan are other frequent locations of bus attacks. Most modem terrorist attacks on transportation systems can be tied to ongoing separatist conflicts, including those by Chechen rebels in Russia, Basque guerillas in Spain, Irish Republican Army terrorists in the United Kingdom, and Palestinians in Israel and the Occupied Territories. There appears to be little significance in the year-to-year trends of attacks against transportation targets.

Table 2.—Terrorist Attacks against Transportation Targets, 1998–2003

Year	Trains/Rail		Airports/Airplanes		Buses and Other	
	Incidents	Deaths	Incidents	Deaths	Incidents	Deaths
1998	48	92	15	2	57	150
1999	5	2	6	0	21	8
2000	13	0	2	0	38	2
2001	41	275	11	3	57	52
2002	60	41	24	3	96	159
2003	14	21	11	25	24	96
TOTAL	181	431	69	33	293	467

Rail Vulnerabilities and Issues

Like air and bus transportation, rail transportation has several unique features making it inherently vulnerable to attack. Rail passenger facilities in particular rely on open architecture and the rapid and easy movement of patrons in and out of facilities and on and off trains. In addition, both freight and passenger rail networks traverse dense urban landscapes that may offer multiple attack points and easy escape as well as vast rural stretches that are difficult to patrol and secure.

Below we consider further some of the specific vulnerabilities of, and security issues regarding, passenger and freight rail systems.

Passenger Rail

Passenger rail facilities present potentially inviting targets for terrorists for a variety of reasons. They are easily penetrated and may have high concentrations of people. The logistics of a passenger rail attack are comparatively simple. For example, given the typical passenger density in a passenger rail station, substantial casualties can be inflicted with a backpack-sized bomb. This is a substantially lower logistical burden than the one faced by the terrorists who committed the September 11 attacks.

In addition, terrorists likely perceive psychological benefits to attacking passenger transportation networks. Rail transportation, like air travel, necessitates the passengers' willingness to put personal safety in the hands of others. An attack is likely to leave passengers reluctant, however temporarily, to travel on the passenger rail system.

The measures used to secure airports and airplanes are likely to be impractical with passenger trains. Airports make extensive use of passenger profiling, passenger screening, metal detectors, X-ray machines, explosives sniffers, hand searchers, and armed guards.[3] Such measures necessarily add to costs and travel times. Passengers expect rail transportation, including commuter lines and subways, to be fast and inexpensive. Security measures resulting in increased fares or longer travel times would likely lead to losses in ridership. Physical space constraints in some locations, coupled with commuter densities, make it nearly impossible to construct rail station "safe zones" like those separating check-in counters from departure gates at airports.

At the same time, while passenger rail facilities and networks in and of themselves may be attractive targets, it seems unlikely that terrorists could exploit the passenger rail network as a weapon in the way that the air transportation network was exploited on September 11. Given that trains travel dedicated routes, they are less likely to be diverted to specific targets. In recent decades, there are few examples of train hijackings, and apparently none that have been identified since 1998.

Freight Rail

Freight rail does not offer terrorists high densities of passenger targets, but it does provide terrorists with some opportunities that passenger rail does not afford. In particular, freight rail is used to transport hazardous materials and dangerous cargoes. An estimated 40 percent of inter-city freight, including half of the Nation's hazardous materials (based on ton miles), moves by rail.[4] In some circumstances, these cargoes are transported through densely populated urban areas. Two accidents involving freight rail help illustrate some of the potential issues associated with hazardous cargoes:

- A train carrying liquid fertilizer derailed in a small North Dakota town in January 2002. The incident killed one and hospitalized 15. The accident punctured 18 cars and resulted in a toxic cloud. Residents within a 3-mile radius of the incident were evacuated.[5]
- In July 2001 a railcar caught fire in a tunnel under downtown Baltimore. The fire, which took five days to extinguish, involved chemicals and other cargo on the train. Rail movements throughout the Northeast Corridor, fiber optic communications, light rail passenger trains in the downtown area, and Amtrak passenger trains were all disrupted during the incident.

What Has Been Done to Secure Rail Transportation?

In the aftermath of the September 11 terrorist attacks, rail transportation and security officials undertook a variety of measures to improve passenger and freight rail security.

Passenger Rail

Even before the September 11 terrorist attacks, the FRA had required passenger trains to have emergency plans in place. One reason for this requirement, and for the attention the Railroad Administration has had to give such general issues, is that passenger train accidents are not infrequent. According to FRA statistics, there were 265 passenger train accidents in 2000 and 201 in 2001.[6] The emergency response skills that operators of passenger trains had acquired were crucial to limiting casualties in the immediate aftermath of the September 11 terrorist attacks, when Port Authority Trans-Hudson (PATH) trains helped evacuate more than 5,000 persons from the basement of the World Trade Center.

Since the September 11 terrorist attacks, passenger systems have conducted further drills, testing, and preparation for emergency situations. Some systems are experimenting with chemical and biological detection systems. The sarin attacks in the Tokyo subway system are one reminder that the next attack on transportation systems may not involve conventional weapons. The Washington, D.C. subway system recently initiated a program for identifying suspicious packages in its system. It is unclear how much training non-security personnel have had in this program, but such a program can be an important element in increasing public awareness about the dangers of such packages, and thereby in reducing the danger from them.

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[3] Brian Michael Jenkins and Larry N. Gersten, "Protecting Public Surface Transportation Against Terrorism and Serious Crime: Continuing Research on Best Security Practices," Mineta Transportation Institute, College of Business, San Jose State University, September 2001.

[4] "Freight Railroad Security Plan," Association of American Railroads at *www.aar.org/rail safety/rail security plan.asp* accessed on August 8, 2003.

[5] "Derailed Train Leaks Gas in ND City." NBC News.com. January 18, 2002.

[6] Accessed at *http://www.railroad-accident.com/html/stats.html,* March 22, 2004.

Freight Rail

In the aftermath of the September 11 attacks, the leadership of the freight rail industry generated more than 100 action items, a multi-stage alert system, and round-the-clock communications with homeland security and national defense officials.[7] These action items were based on the results of a strategic review of the transportation of hazardous materials, the security of the industry's information infrastructure, freight rail operations and infrastructure, and military needs relating to the rail network. The critical action items included the need to:[8]

- Integrate protective housings, valves and fittings into hazardous transport infrastructure to prevent tampering and facilitate emergency response.
- Increase surveillance of freight equipment, through training of staff on observation and the installation of video surveillance equipment.
- Improve operations by monitoring for signal tampering; requiring crews and dispatchers to verify communications for train movements and dispatches; and locking locomotive doors to prevent hijackings.
- Secure the information infrastructure that terrorists could use to enhance attacks or cause systemic shutdowns.
- Collaborate with the Department of Defense (DOD) to ensure the viability of STRACNET (Strategic Rail Corridor Network)—designated rail lines that are capable of meeting unique DOD requirements, such as the ability to handle heavy, high or wide loads.

What Can Be Done to Improve Rail Security?

Because few rail systems have been confronted with sustained terror campaigns, it is difficult to evaluate the effects of security measures. The United Kingdom's experience with IRA attacks on rail infrastructure offers one of the better opportunities to understand both terrorist behavior and the value of security measures. Analysis of the IRA bombing campaigns in London shows that the terrorists sought to exploit simple gaps in security.[9] Examples of such gaps included breaks in fencing allowing access to certain targets, poor lighting allowing concealment of actions, and litter bins allowing hiding of packages.

The analysis of these incidents led to the development of a broad security strategy that addressed some of the more glaring weaknesses exploited by the terrorists. The security elements included:

- Repairing gaps in fei1cing to provide more control around the perimeter of rail facilities.
- Improving lighting, both to deter terrorists and to improve facility observation.
- Installing blast resistant trash containers to reduce the utility of placing bombs in trash containers while ensuring that passengers had a place to dispose of trash (and that bombers would be less able to hide explosives among accumulated trash).
- Installing close-circuit television to provide stationmasters and security personnel with better visibility throughout the facilities.
- Installing signage to increase awareness about the danger of unattended packages and to improve the ability to evacuate facilities during emergencies.
- Training of personnel and passengers to have a role in security by reporting suspicious behavior, identifying suspicious (especially unattended) packages and luggage, and improving readiness for evacuation and emergency actions.

Other methods used in Britain included covert testing of security measures, increased presence of armed personnel and security officers, and the use of public communication strategies to advise on threats, service disruptions and the availability of alternate routes and transportation methods.

It is also important to prepare for hoaxes and false alarms, both of which can disrupt rail operations. If there were to be a passenger rail attack in the United States, it seems likely that there would be an increase in false alarms in the aftermath (as, for example, happened in the aftermath of the anthrax letters of 2001). It is there-

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[7] Freight Railroad Security Plan," Association of American Railroads at *www.aar.org/rail__safety/rail__security__plan.asp* accessed on August 8, 2003.

[8] Curt Secrest, "Railroad Security Issues," presented to the Pennsylvania Joint Rail Freight Seminar on May 9, 2002, Philadelphia, PA.

[9] Brian Michael Jenkins and Larry N. Gersten, "Protecting Public Surface Transportation Against Terrorism and Serious Crime."

fore important for rail officials to develop policies and procedures for dealing with hoaxes and false alarms so that these would not unduly burden rail operations.

The U.K. security measures are broadly applicable to the U.S. passenger rail system. Nevertheless, there are two important gaps in our knowledge. First, it is not clear how much should be spent on rail security relative to security at other potential targets. Second, the cost effectiveness of these rail measures has not been assessed. Threat assessments are required to address both of these issues.

Improving Freight Rail Security

Many of the elements identified as improving security for passenger rail are applicable to freight rail as well. To a considerable extent, the security of the Nation's freight rail system is in the hands of the private sector. At the same time, freight rail competes with trucks and other transport modes for business, and thus it is important that the size and incidence of security costs be considered, and how the private sector might be provided with incentives to improve security.

There is concern about the resilience and robustness of the freight rail system. Many key freight corridors are heavily used, compete with passenger trains for track space, and suffer from a lack of alternative routes. Attacks on critical freight nodes or functions could therefore create substantial bottlenecks and throughput pressures. Some characterize the freight rail system as "growing simultaneously more robust and more fragile."[10] Robustness is evident in the considerable growth in the freight rail industry, and the relatively large shares of freight by tonnage and value that the rail system carries.[11] Concerns about fragility arise from the continued focus on just-in-time manufacturing and logistics, and the freight rail industry's corresponding need to build capacity that serves these manufacturing patterns.[12]

Some, however, are more confident that the national transportation infrastructure is resilient and that the system is unlikely to collapse because of any single attack. The National Research Council concluded that surface transportation systems are more vulnerable to point attacks than systemic attacks "because of the decentralized, multimodal character of surface transportation, mounting a system-wide attack with large spatial and temporal impact would be difficult."[13] In particular, experience with natural disasters that have affected multiple elements of the system suggests a substantial amount of systemic resilience.[14]

Next Steps

No security system for passenger and freight rail will be perfect. It is therefore critical to consider the consequences of what security failures might mean, and to balance these potential consequences with priorities for preventing them. Little is known about how long it might take to restart the passenger and freight rail systems in the aftermath of an attack similar to those of September 11. Similarly, there are complex issues of liability that relate to existing legislation such as the Terrorism Risk Insurance Act.

There are tools at our disposal that will help improve our understanding of passenger and freight rail security issues. Simulation exercises and games, for example, can help identify weaknesses in response capacities and deepen our understanding of how to resume activities in the aftermath of an attack. Similarly, threat assessments can be useful for guiding decisions about how much, and where, to spend on passenger and freight rail security programs.

There is a need for a coordinated Federal policy on rail security, encompassing freight, passenger and commuter rails. Compared to other transportation sectors, decision-making appears to be quite decentralized between a number of federal, state, local, and private concerns. A coordinated approach for counterterrorism measures in the rail transportation system should undertake three tasks. First, it should define the Federal role in preventing or mitigating such attacks. Second, it should prioritize investments needed for preventing attacks against rail transportation systems with those needed to prevent attacks against other transportation systems. Third, it should define the roles and responsibilities of federal, state, and local agencies, transportation companies, and passengers and freight shippers in

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[10] Michael Wolfe, "Freight Transportation Security and Productivity," paper for the FHWA Office of Freight Management and Operations, April 2002.

[11] "Freight-Rail Bottom Line Report," American Association of State Highway and Transportation Officials (AASHTO), 2003.

[12] AASHTO, 2003, pp. 46–47.

[13] "Improving Surface Transportation Security: A Research and Development Strategy," National Research Council, 1999, Washington, D.C.

[14] Michael Wolfe, *Freight Transportation Security and Productivity: Complete Report.* Long Beach, CA: Intermodal Freight Security and Technology Workshop, April 27–29, 2002. p. 12.

preventing terrorist attacks against rail systems and in responding to their consequences.

Given the magnitude of the recent attacks in Spain, it would be prudent to undertake such planning steps in the near future.

Senator HUTCHISON. Thank you.

Mr. Hamberger.

STATEMENT OF HON. EDWARD R. HAMBERGER, PRESIDENT AND CHIEF EXECUTIVE OFFICER, ASSOCIATION OF AMERICAN RAILROADS

Mr. HAMBERGER. Thank you, Madam Chairman. On behalf of the members of the Association of American Railroads, thank you for holding this hearing today and giving us the opportunity to testify. AAR members account for the vast majority of freight rail mileage, freight employees, and freight revenue in the United States, Canada, and Mexico.

Let me just address your question right out, Madam Chairman: Did we step to the plate? I believe that the railroad industry reacted swiftly and positively to the terrorist attack of September 11. But more importantly, Admiral James Loy, Deputy Secretary of the Department of Homeland Security, testified recently on the House side, saying: "AAR and its members have been terrific in coming to the plate and helping us figure strategic plans for the transportation sector."

Recognizing the character of some of the cargo that we carry and having a history of putting the safety of our employees and the communities in which we operate as our top priority, railroads did on their own initiative conduct a thorough risk analysis of the rail network to identify vulnerabilities and develop countermeasures. This resulted in the implementation of an industry-wide, risk-based rail security plan that used CIA and intelligence communities best practices.

I emphasize that we went outside of our industry to use these outside experts with a background in intelligence because, as Senator Biden pointed out earlier this morning, we did not know how terrorists think. We wanted to look at our system the way terrorists would look at our system. Using this perspective, we came up with a plan that defines four security alert levels and details specific actions to be taken at each level.

It also raised our baseline of security by implementing 53 permanent changes in rail operations, including one suggested by the gentleman on my right, employee training and awareness so that we have an army of over 200,000 sets of eyes and ears out there on the railway.

We are currently at level 2, which tracks very closely the specific countermeasures suggested to the private sector to be taken at Code Level Orange by the Department of Homeland Security.

But, as has been discussed here, the rail network is vast and open. Our risk assessment identified over 1300 critical assets based on the need for protection of commerce, population, and military cargo. Consequently, we needed to come up with a security infrastructure that would allow railroads to focus our resources on where the threat is greatest. This requires that railroads quickly receive the latest intelligence data, including threat information,

from government agencies. Consequently, we are in constant communication with pertinent intelligence and security personnel at DHS, DOD, Department of Transportation, the FBI's National Joint Terrorism Task Force, as well as State and local enforcement agencies.

Knowledgeable railroad analysts literally work side by side with government intelligence analysts at the NJTTF and DHS to help evaluate information at the Top Secret level. To my knowledge, we are the only industry sector to have made this commitment.

The heart of this communications system is the Railway Alert Network, or RAN, which was established after 9/11 to provide terrorism threat information to the industry. The hub of the RAN is in the AAR's operations center a few blocks from here, which operates at the Secret level and is staffed with mobile communications around the clock. The RAN is liked to the Surface Transportation Information Sharing and Analysis Center, yet another acronym, the ST–ISAC, which was created by the AAR at the request of the Department of Transportation, to collect, analyze, and distribute security information to protect both physical assets and information technology systems. Personnel there are cleared at the Top Secret level and it operates 24 hours a day.

In addition to the freight railroads, Amtrak and 75 commuter and transit rail authorities are members of the ST–ISAC.

Of course, one area that receives special attention from the railroads is the movement of hazardous materials. The uninterrupted flow of hazardous materials is necessary for the health and safety of the United States as well as its economic growth. Chlorine, for example, is critical to physical health because it is used to purify more than half of the Nation's water supplies and is used in the manufacturing of a huge array of pharmaceutical products.

This vividly underscores the tension between the need for the free flow of commerce and the need for security. Recognizing this tension, the railroads worked closely with the Government agencies and major customer groups to avoid logistical gaps in the supply chain. For example, the Chlorine Institute used the same outside expert security team that we did to develop a chlorine transportation security plan that dovetails very closely with the railroads' plan.

Let me just say that the railroads are opposed to legislation that would grant State and local governments the ability to restrict rail movements of hazardous materials. Because rail transportation is interstate in nature, it requires a uniform set of standards that apply nationwide. This uniformity would be severely jeopardized if states or localities sought to force rerouting by prohibiting the transportation of hazardous materials within their jurisdictions.

Rerouting would lead to an increase in miles traveled, increased switching and handling of cars, thereby potentially increasing exposure, and only transfer that exposure from one community to another. It could also lead to the diversion of hazardous materials shipments to the highways, and the most recent DOT data indicate that on a ton-miles basis hazardous material releases are 16 times as likely to occur on highways as on rails.

Freight railroads are proud of the efforts we have taken to keep our Nation's vital rail transportation link open and secure since the

terrorist attacks of September 11 and we will continue to work with this committee, others in Congress, the Federal agencies, our customers and other relevant parties to further enhance the safety and security of the Nation's railroads.

Thank you.

[The prepared statement of Mr. Hamberger follows:]

PREPARED STATEMENT OF EDWARD R. HAMBERGER, PRESIDENT AND CHIEF EXECUTIVE OFFICER, ASSOCIATION OF AMERICAN RAILROADS

On behalf of the members of the Association of American Rai1roads (AAR), thank you for the opportunity to meet with you today to discuss railroad security. AAR members account for the vast majority of rail mileage, employees, and revenue in Canada, Mexico, and the United States.

The AAR and its members join the rest of our Nation in extending our sympathy and condolences to the victims of the recent terrorist attacks in Madrid. Those senseless attacks underscore the unfortunate reality that the global war on terror remains unfinished. The attacks also remind us of the importance of security as it relates in particular to railroads.

Freight railroads are keenly aware of the tension between the need for transportation efficiency and the assurance that our transportation systems are adequately protected from terrorist threats. We urge Congress to strike a proper balance between protecting our country's transportation assets and its citizens, and providing for the free flow of goods and promoting our international competitiveness. As Secretary Mineta has remarked, "What we don't want is for our checkpoints to become chokepoints."

Below I will discuss the many ways that U.S. freight railroads have addressed security in the post-9/11 era.

The Immediate Aftermath of September 11

The rail industry reacted swiftly to the events of September 11, in full cooperation with government authorities. In the immediate aftermath of the attacks, railroads tightened security and intensified inspections across their systems. Major railroads—which maintain their own police forces to help assure the security of employees, property, and freight—put into place more than 50 countermeasures to help ensure the security of the industry. For example, access to important rail facilities and information was restricted. The industry significantly increased cyber-security procedures and techniques. Employee records were compared with FBI terrorist lists. Security briefings, like safety briefings, became a daily part of many employees' jobs.

In late September 2001, the AAR Board of Directors established a Railroad Security Task Force. The task force had the full participation of AAR members, including our Canadian and Mexican members and the American Short Line and Regional Railroad Association (ASLRRA). The overarching focus of this task force was (1) to ensure the safety of rail employees and the communities in which railroads operate; (2) to protect the viability of national and regional economic activity; and (3) to ensure that railroads can continue to play their vital role in the military mission of our Nation.

Over the next several months, the task force conducted a comprehensive risk analysis of the freight rail industry. Using CIA and national intelligence community "best practices," five critical action teams (consisting of more than 150 experienced railroad, customer, and intelligence personnel) examined and prioritized railroad assets, vulnerabilities, and threats. The critical action teams were:

1. Information Technology and Communications: This team examined the security of railroad communications, control systems, and information systems, including the evaluation of procedures regarding system redundancy, data confidentiality, emergency incident handling, and reconstitution of service. Based on the efforts of this team, many security measures were implemented immediately across the industry.

2. Physical Infrastructure: This team assessed the physical security of essential bridges, buildings, dispatch centers, tunnels, storage facilities, and other structures. A database of critical assets was created and recorded in a Geographic Information System. Amtrak's critical assets are inc1uded in this database. The team also addressed cross border and port "gateway" physical security issues.

3. Operational Security: This team documented the "life cycle of a train" and determined ways to minimize exposure to unplanned occurrences while trains are in operation. It also addressed the issue of fuel supply.

4. Hazardous Materials: This team examined the transport of hazardous materials by rail, with emphasis on materials (such as potentially poisonous gases) that pose the greatest potential safety risk. The team identified current shipping patterns for these materials and worked closely with the chemical industry and tank car manufacturers to evaluate alternatives, inc1uding routing restrictions, product remanufacturing, and packaging.

5. Military Liaison: This team worked with the Department of Defense and its Military Traffic Management Command (MTMC) to determine immediate and ongoing military traffic requirements and to identify capacity, security, and equipment needs of the industry to meet military demand. The Department of Defense relies on freight railroads to move ordnance and equipment. For example, railroads transported some 98 percent of the ammunition used by the United States in the Iraq war. The MTMC, recently renamed "Surface Deployment and Distribution Command," has designated 30,000 miles of rail corridors—known as the Strategic Rail Corridor Network (STRACNET)—as essential to the national defense. The AAR is in full agreement with this assessment. Our nation's railroad route structure is vital to both homeland security and to the support of DOD initiatives.

In addition to the above activities, freight railroads cooperated fully with a separate team, involving the Federal Railroad Administration (FRA), commuter railroads, and Amtrak, dealing with rail passenger security.

The Terrorism Risk Analysis and Security Management Plan

The end result of the work of the freight railroad critical action teams was the development of a Terrorism Risk Analysis and Security Management Plan ("Plan"), a comprehensive, 24/7 priority-based blueprint of actions designed to enhance the security of the Nation's freight rail network and its ability to support our economy, national defense, and public health.

The AAR Board of Directors adopted the Plan on December 6, 2001, and it remains in effect today. The security processes and analyses detailed in the Plan, including actions and countermeasures, are periodically evaluated—and modified, as appropriate—for effectiveness and to ensure maximum efficiencies from advances in security technology and procedures.

The Plan defines four security alert levels and details the actions to be taken at each level as the terrorist threat increases. Alert level actions are applied in the areas of operations (including transportation, engineering, and mechanical), information technology/telecommunications, and railroad police.

Alert Level 1 is "New Normal Day to Day Operations" and exists when a general threat of possible terrorist activity exists but warrants only a routine security posture. Thirty-two actions are in effect at this level, including conducting security training and awareness activities; restricting certain information to a need-to-know basis; restricting the ability of unauthenticated persons to trace certain sensitive materials; and periodically testing that security systems are operating as intended.

Alert Level 2 is "Heightened Security Awareness" and applies when there is a general non-specific threat of possible terrorist activity involving railroad personnel and facilities. Twenty-one additional actions are in effect at this level, such as including security and awareness briefings as part of daily job briefings; conducting content inspections of cars and containers for cause; conducting spot content inspections of motor vehicles on railroad property; and increasing security at designated facilities.

As of today, the freight rail industry is at Alert Level 2, with a number of added security actions focused on transportation of certain hazardous materials in several metropolitan areas. These extra precautions are in place to address special circumstances as described to the railroad industry by the Department of Homeland Security.

Alert Level 3 is put into place when there is "a credible threat of an attack on the United States or railroad industry." It applies when an increased, credible, and more specific threat of terrorist activity exists than at Level 2. A decision to declare Level 3 will be evaluated in light of the specificity of threat against railroad personnel and facilities. The 40 additional actions in Level 3 must be capable of being maintained for weeks without causing undue hardship on railroads or their customers. Examples of Level 3 actions include further restricting physical access and increasing security vigilance at control centers, communications hubs, and other designated facilities and requesting National Guard security for critical assets.

Alert Level 4 applies when a confirmed threat against the railroad industry exists, an actual attack against a railroad or an attack in the United States causing mass casualties has occurred, or other imminent actions create grave concerns about the safety of operations. There are 19 additional actions to be implemented at this level that will be instituted for up to 72 hours and periodically evaluated for continuation. These include stopping non-mission-essential contract services with access to critical

facilities and systems; increasing vigilance and scrutiny of railcars and equipment during mechanical inspections to look for unusual items; and ensuring continuous presence of guards at designated facilities and structures.

Alert Levels 3 and 4 can be declared industry-wide for a short period of time or can be declared in a particular geographic or operational area (*e.g.,* the Midwest or hazardous materials) where or when intelligence has identified that terrorist action against a specific location or operation is imminent.

The Railway Alert Network and ST–ISAC

To help ensure that the parties involved have access to pertinent intelligence and other information, the rail industry is in constant communication with intelligence and security personnel at the Department of Homeland Security (DHS), the Department of Defense (DOD), the Department of Transportation (DOT), the FBI's National Joint Terrorism Task Force (NJTTF), state and local law enforcement, and others. A railroad police officer and knowledgeable railroad analysts work literally side-by-side with government intelligence analysts at NJTTF and in two intelligence offices within DHS (the Information Analysis and Infrastructure Protection Directorate and the Transportation Security Administration) to help evaluate intelligence at the Top Secret level.

The heart of this communication system is the Railway Alert Network (RAN). The major purpose of the RAN, which was established by the AAR shortly after September 11, is to monitor the level of threat to the rail industry and to alert the industry if it changes. The hub of the RAN is AAR's Operations Center, which operates at the Secret level and is staffed with mobile communications around the clock at Alert Level 2 and is physically staffed at Levels 3 and 4.

The RAN is linked to the Surface Transportation Information Sharing and Analysis Center (ST–ISAC). The ST–ISAC, which was created by the AAR at the request of the U.S. Department of Transportation, provides a robust capability for collecting, analyzing, and distributing security information from worldwide resources to protect vital physical assets and information technology systems. Cleared at the Top Secret level, the ST–ISAC also operates 24-hours-a-day, 7-days-a-week. Along with the freight railroads, Amtrak and approximately 75 transit and commuter rail authorities (through the American Public Transit Association) are members of the ST–ISAC.

Obviously, rail security efforts depend a great deal on the efforts of railroads' dedicated and highly professional employees—including engineers and conductors aboard trains, maintenance of way crews and inspectors working along the tracks, railroad police officers, and others. They are the "eyes and ears" in the industry's security effort, and we should all be grateful for their vigilance and care.[1]

In recognition of the thoroughness of the railroad security plan and the dedication with which it has been put into effect, in June 2003 the Association of American Railroads was named a recipient of the U.S. Department of Defense's James S. Cogswell Award for Industrial Security. The Cogswell Award is the most prestigious award in the industrial security field. Of nearly 11,000 cleared contractors, only 15 were selected to receive the award in 2003. The railroad industry is also one of the few private sector industries to receive an "A" for its security efforts in a recent independent analysis by *The Washington Post.*

Notwithstanding all of these rail industry efforts, we recognize that there can be no 100 percent guarantee against terrorist assaults. If such an assault involving freight railroads occurs, railroads have established programs and procedures that can and will be invoked that are designed to respond to, mitigate, and minimize the impact of dangerous and unusual incidents. The programs and procedures include the establishment of emergency response plans for hazardous materials incidents, operational administration redundancy, and the training of rail employees and public emergency response personnel.

Railroad Hazardous Materials Movements

Railroads work to ensure the continued safety of hazardous materials transport in numerous ways.

For example, railroads provide rigorous tank car quality assurance programs, field testing, and inspections of chemical loading facilities; assist communities in developing and evaluating emergency response plans; provide hazmat training for emer-

[1] Under existing Federal law, railroad police officers have law enforcement authority only while on the property of their own railroad. However, Section 212 of S. 1402 (the "Federal Railroad Safety Improvement Act"), which passed the Senate in November 2003 and has been referred to the House Committee on Transportation and Infrastructure, would grant railroad police enforcement authority on *any* railroad. Railroads strongly support this provision and commend this committee for its support of it.

gency responders; and support Operation Respond, a nonprofit institute devoted to improving the communication of emergency response information to police and fire departments.

Tank cars must meet stringent U.S. DOT specifications if used to transport hazardous materials. For example, they must be equipped with pressure relief devices (to protect the tank in the event of fire) and double shelf couplers (to prevent tank punctures by a coupler). Some cars also have steel "head shields" at each end of the car (to further protect against puncture), thermal shields, jacketed insulation systems, and protected top and bottom fittings.

The AAR and the railway supply industry jointly fund the Tank Car Safety Research and Test Project. This project monitors tank car accidents and is continually updating a comprehensive database on the precise nature of damage to tank cars. Analysis of these data improves safety by improving researchers' ability to identify the causes of tank car releases and how to help prevent future occurrences. The project database is often cited by the U.S. DOT as a role model for other modes of transportation. In addition to its ongoing safety data collection and analysis activities, the project also has a number of ongoing research efforts, including efforts aimed at developing better steels for tank cars and developing a method for testing the effectiveness of surge suppression devices for tank cars.

Going forward, the railroad industry is committed to using resources at its disposal and continuing to work closely with Federal security agencies and with local and state authorities to help ensure that our Nation's security and safety are not compromised. At the same time, it must be recognized that the flow of many types of essential products—including some products that are characterized as "hazardous materials"—cannot be unreasonably disrupted without causing significant damage to our Nation's health and economic well being.

Chlorine, for example, is potentially extremely dangerous if misused or mistreated. At the same time, the chemical is absolutely critical to our physical health because of its widespread use as a purifier at water treatment facilities, in a huge array of pharmaceutical products, and in hundreds of other uses. Even a brief shutdown of the transportation of chlorine would have potentially devastating effects.

The rail industry cautions against actions that might appear appealing at first glance, but in reality could be contrary to the public interest. For example, railroads oppose Section 443(g) of S. 1978, the "Surface Transportation Safety Reauthorization Act of 2003," which passed the Senate as part of the TEA–21 reauthorization bill. This provision authorizes the U.S. DOT to grant to state or local authorities the power to preempt Federal law regarding hazmat transportation during certain "emergency" situations. Railroads also oppose efforts to grant to local governments the authority to restrict rail movements.

Railroads operate as part of an integrated national network and regulatory constraints on operations can have a ripple effect throughout the rail system. The effect is not circumscribed by state or local boundaries. Because rail transportation is inherently interstate in nature, the safe rail transport of any commodity, including hazardous materials, requires a uniform set of standards that apply nationwide.

This uniformity would be severely jeopardized if states or localities sought to force rerouting by prohibiting the transportation of hazardous materials within their jurisdictions. If this happened, optimal transportation routes, from the perspective of national safety and security, might be foreclosed. For example, rerouting can involve an increase in miles traveled, and those additional miles could be on rail infrastructure less suitable (for a variety of reasons) to handling hazardous materials. Emergency response capability along alternate routes may lack requisite expertise in handling the most dangerous commodities. Additional switching and handling of cars along with added "dwell time" in yards—all potential consequences of using less efficient routes—also have the effect of increasing exposure.

Indeed, given the limited routing options for rail transportation, rerouting mandates of this sort could effectively result in the near cessation of hazardous materials transportation by rail, leading to the diversion of such traffic to the Nation's highways where the likelihood of accidents involving hazardous materials is far higher.[2]

Recently, the D.C. City Council has raised concern about the transportation of hazardous materials through the city. The railroad industry is cooperating fully with the DHS, the DOT, and the city government to assess the security of the rail corridor that runs through Washington, DC. Within the last week, vulnerability assessment teams conducted an intense review of the railroad property within the Beltway. Since the terrorist attacks on September 11, 2001, CSX Transportation,

[2] According to U.S. DOT data, rai1roads and trucks carry roughly equal ton-mileage of hazardous materia1s, but trucks have nearly 16 times more hazmat releases than railroads.

which owns the railroad, has "hardened" that corridor by adding surveillance, restricting access, enhancing Communications, and coordinating with local law enforcement, U.S. Capitol Police and the Department of Defense. This ongoing assessment will identify any additional countermeasures that may be required.

The rail industry agrees that vigilance in the transportation of hazardous materials must be maintained, and efforts must be made to increase hazmat safety where possible and practical. But decisions to reroute potentially hazardous products must be based upon sound analysis of the consequences. To address problems associated with the transportation of important chemicals, the rail industry is working closely with the chemical industry, DOT, DHS, the Homeland Security Council at the White House, and others to address potential vulnerabilities—and recommend appropriate safeguards—in an analytical and comprehensive fashion.

One of the issues of concern identified by the rail industry in the course of its risk assessment is a Federal requirement to place placards on rail cars carrying hazardous materials. Local first responders use the information posted on placards to determine car contents. The industry is working with the FRA and the Transportation Security Administration to study alternative means of providing car content information to the emergency response community. If successful, this could serve as a substitute for the reliance on placards.

In developing the industry's security plan, the railroads closely coordinated with major customer groups to avoid logistical gaps in the supply chain. For example, the Chlorine Institute subsequently developed a chlorine transportation security plan that dovetails with the railroads' plan. The American Chemistry Council and the AAR are working toward agreement on how to coordinate security measures for shipments of other hazardous materials.

Passenger Railroads

More than 90 percent of the route mileage over which Amtrak operates, as well as a significant portion of the trackage over which many commuter railroads operate, is actually owned and maintained by freight railroads. Therefore, actions taken by freight railroads to enhance security also benefit passenger rail. Freight railroad police coordinate with and support Amtrak police to, among other things, increase uniformed police presence in rail passenger stations. Amtrak, commuter rail and transit authorities, and the freight railroads receive and share threat and incident information through the RAN and the ST–ISAC. That said, freight railroad security-related plans and procedures are not specifically designed to protect passengers or to be a substitute for actions that Amtrak or other passenger railroad operators might choose to take.

Port and Border Security

The issue of port security is separate and distinct from the issue of rail security, although railroads, by virtue of the fact that they carry millions of containers unloaded from or loaded on to steamships each year, are certainly impacted. Ports have spent hundreds of millions of dollars enhancing their security, much of it funded by Federal grants. Railroads work closely with the Captains of Ports to ensure compliance with Coast Guard regulations regarding port facility security.

Freight railroads operating in the United States, Canada, and Mexico form a seamless, coordinated, and heavily-traveled network, with hundreds of thousands of railcars and intermodal units crossing each border each year. Railroads work diligently with the U.S. Bureau of Customs and Border Protection (CBP) and others to enhance border security.

For example, one year ago, United States and Canadian customs agencies and Canada's two major railways signed a declaration of principles to enhance security at the Canada-U.S. border and to ensure secure rail access to the United States. The declaration—signed by CBP, Canada Customs and Revenue Agency (CCRA), Canadian National Railway (CN), and Canadian Pacific Railway (CP)—outlines principles for targeting, screening, and examining rail shipments transported by the Canadian carriers into the United States. The declaration includes guidelines for the electronic transmission of cargo information by the railroads to customs officials in advance of each train's arrival at the border and installation of Vehicle and Cargo Inspection System (VACIS) and radiation detection equipment at CN and CP border crossings.

Rail VACIS systems, which are also in use at rail border crossings with Mexico, use gamma ray technology to scan entire trains one railcar at a time. The gamma ray source and detectors are stationary as the train moves through the system. Inspectors examine scanned images of rail cars for contraband, potential terrorists, or terrorist weapons without opening them and potentially endangering lives. Suspicious rail cars are segregated for inspection, with minimal disruption to the flow

of legitimate commerce. Today, where CBP has installed this equipment on the borders with both Canada and Mexico, 100 percent of rail cars are screened.

U.S. freight railroads are also active participants in the Customs-Trade Partnership Against Terrorism (C–TPAT). C–TPAT is a joint government-business initiative within the CBP to build cooperative relationships that strengthen overall supply chain and border security. Through this initiative, CBP is asking businesses—including railroads—to ensure the integrity of their security practices and communicate their security guidelines to their business partners within the supply chain. I am happy to report that all U.S. Class I railroads are currently C–TPAT certified. The certification process involves a comprehensive review of a railroad's procedural security, physical security, personnel security, education and training, access controls, manifest procedures, and conveyance security.

Railroads have also been active participants in the significant expansion of Integrated Border Enforcement Teams (IBET) across the U.S./Canada border. The mandate of these teams is to enhance border integrity and security by "identifying, investigating and interdicting persons and organizations that pose a threat to national security or engage in other organized crime activity."

Finally, on January 5, 2004, final regulations issued by the CBP went into effect requiring all transportation modes to submit cargo information electronically before arriving at the U.S. border; the rail industry was an active participant in the regulatory process. The required minimum advanced notification for rail cargo is two hours. Railroads are complying with this requirement. The two-hour requirement is a substantial improvement over the 24-hour notification period first proposed by CBP, which would have been devastating to the efficient flow of commerce within our Nation.

Funding

Railroads have been underwriting the cost of security measures for the benefit of the general public and for national defense, in addition to normal expenditures made to ensure the safety of rail operations. Additional protective measures required at the highest alert levels cannot be sustained by the industry alone. This is reflected in the railroads' Plan, which, at these higher levels of alert, calls for the use of National Guard and local law enforcement support to augment industry protection of critical infrastructure. In order to effectively achieve such protection, advanced planning will be required to coordinate the process among all the relevant parties.

The rail industry is also seeking to continue technical research into protective measures and emergency response protocols and has identified a need for $15 million in Federal assistance to help achieve these objectives.

Finally, the rail industry may wish to request assistance for the costs brought about by extraordinary security measures required by any future government mandates.

Conclusion

U.S. freight railroads are proud of the success they achieved in keeping our Nation's vital rail transport link open following the September 11, 2001 terrorist attacks. Since then, railroads have taken a number of steps to increase the security of our Nation's rail network, including the development of a comprehensive security management plan that incorporates four progressively severe alert levels. We will continue to work with this committee, others in Congress, Federal agencies, and all other relevant parties to further enhance the safety and security of our Nation's railroads.

Senator HUTCHISON. Thank you.

Mr. Millar.

STATEMENT OF WILLIAM W. MILLAR, PRESIDENT, AMERICAN PUBLIC TRANSPORTATION ASSOCIATION

Mr. MILLAR. Thank you, Madam Chair. It is my pleasure, on behalf of the 1,500 organizations of the American Public Transportation Association, to appear before you this morning.

It is particularly important that you are holding this hearing in light of the recent terrorist attacks in Madrid, and I have particularly appreciated watching all the Senators who have attended today as they have asked their questions. Clearly there is an un-

derstanding on this Committee of many of the basic issues that face us, and we look forward to continuing to work with the Committee as it seeks to put together legislative recommendations.

I cannot overemphasize the importance of working to improve security for the 32 million Americans who will board public transportation vehicles today. Over 11 million of those boardings will be on rail systems. While this Committee has jurisdiction primarily over the rail area, we have to look at surface transportation programs in their entirety and the full spectrum of public transportation services, whether it be commuter rail, rapid rail, bus, ferry boats, or paratransit.

Also, this intermodal relationship extends beyond the passenger world, and I am very pleased to be appearing with my colleague, Ed Hamberger, from the Association of American Railroads, because obviously making sure that freight flows easily and quickly as the passenger service flows easily and quickly is important as well. Many freight railroads operate some part of the passenger rail system and some of the commuter rail systems handle significant amounts of rail freight. So this relationship has to be taken into account.

Our public transit systems, as you have heard from other speakers, are of necessity an open environment, meaning there are literally tens of thousands of places that our customers can reach our services. Over 9.5 billion times last year, people used public transit. This is something like 16 times more people than use the airline system, 450 times more than travelers who use the Amtrak system. So the Nation's public transit systems are an integral part of our transportation network, they are available in all 50 states, and we need to consider this as we plan nationwide.

Our transit employees who work on these systems are part of the front line of the Nation's fight against terrorism. Indeed, they are part of the first responder teams. If a terrorist event occurs on a transit system, they become the initial first responders that are there. Besides the obvious role that they would play in that region, we are also expected to be part of any mass evacuation that might be necessary in times of emergency. Again, other speakers have spoken about September 11, 2001, when literally hundreds of thousands of Americans exited from the danger areas on public transportation systems.

So safety and security is a top priority of our industry. It was a top priority before September 11. Unfortunately, as the earlier speaker has said, there have been events around the world on public transportation systems, be they the IRA bombings in the British Isles or the saran attacks in Japan or any of the more recent attacks. So our industry has known about these and has been working to develop and implement plans for quite some time.

Since September 11, 2001, we have identified some $1.7 billion that State and local governments have invested in security and emergency preparedness, which has been very important in making our transit systems more secure today than they were before. Our members and APTA continue to work closely with a number of Federal agencies, particularly the Federal Transit Administration and the Federal Railroad Administration, which have been most

helpful in developing plans and helping us do assessments of need and in implementing good strategies to meet those assessments.

More recently, the Department of Homeland Security, as you heard this morning, is taking a much greater interest in our sector and we are grateful for that.

Security assessments for all the rail, transit, and commuter rail systems in the country have been developed and the plans that have resulted from those assessments are now being implemented. My written testimony includes background information on this issue.

APTA is also pleased to have been designated the public transportation sector coordinator by the U.S. Department of Transportation and is very much involved in the Information Sharing and Analysis Center, the so-called ISAC, process. One of our concerns, however, is that the funding for that expires in February, 2005. We doubt that the need for the ISAC will expire in 2005.

We have recently completed a survey of our members. We will be releasing the full details of the survey next month and we will make those available to the Committee. But the preliminary analysis shows that our members find approximately $6 billion that ought to be invested in increased security. Now, that is over and above the regular and continuing part of the transit systems' budgets that I testified to earlier, where they are spending State and local resources in that regard.

So we do believe that it is time for the Department of Homeland Security to step up to the plate and provide additional funding to make our systems even more secure. We respectfully request the help of this Committee as we seek to have the President's 2005 budget amended to include specific line items for transit and railroad security. We think that we have done enough work now in the past 3 years that we understand the priorities of where this money ought to be spent and we want to work with Congress and the Department of Homeland Security to make sure a proper program is developed over the next several years and funds made available so that we can invest the funds wisely.

Given the recent events, given the focus now, the Department of Homeland Security and the U.S. Department of Transportation and our industry need to work more closely together than ever. We thank you again for holding this hearing, Mr. Chairman, and we will be pleased to answer questions or provide additional information as the Committee may desire.

Thank you very much.

[The prepared statement of Mr. Millar follows:]

PREPARED STATEMENT OF WILLIAM W. MILLAR, PRESIDENT, AMERICAN PUBLIC TRANSPORTATION ASSOCIATION

Mr. Chairman, thank you for this opportunity to testify on the security and safety of passenger rail and public transportation systems. We commend the Senate Commerce Committee for holding this hearing today particularly in light of the recent terrorist attacks in Madrid, Spain.

About APTA

The American Public Transportation Association (APTA) is a nonprofit international association of over 1,500 public and private member organizations including transit systems and commuter rail operators; planning, design, construction, and finance firms; product and service providers; academic institutions; transit associa-

tions and state departments of transportation. APTA members serve the public interest by providing safe, efficient, and economical transit services and products. Over ninety percent of persons using public transportation in the United States and Canada are served by APTA member systems.

Passenger Rail and Public Transportation Security

Mr. Chairman, we do not need to emphasize the critical importance of keeping America's public transportation secure in this time of heightened national security. While this Committee has jurisdiction over passenger and freight rail, we must look at the security of our surface transportation program in its entirety and that includes the full spectrum of public transportation services. At intermodal hubs such as Washington's Union Station there are blend of services including—intercity passenger rail, commuter rail, subway, and bus transportation. Congress should examine the unique security needs for all of America's public transportation.

This intermodal relationship extends to the Nation's freight railroads, and APTA is pleased to work closely with the Association of American Railroads in this regard. Many commuter rail services are operated on freight-owned lines. Moreover, many commuter rail systems handle significant amounts of rail freight traffic. For example, the Southern California Regional Rail Authority (SCRRA) provides the right-of-way for the movement of 50 to 75 freight trains a day on property it owns, including all the rail freight traffic out of the Port of San Diego and 10–15 percent of the rail freight traffic out of the Ports of Los Angeles and Long Beach.

America's public transportation services are by design and necessity an open environment. Over 9 billion transit trips are taken annually on all modes of transit service. People use public transportation vehicles over 32 million times each weekday. This is more than sixteen times the number of daily travelers aboard the Nation's domestic airlines and over 450 times the number used by Amtrak intercity services. The numbers of customers using public transportation each and every day creates ongoing challenges for enhancing security within our transit environments.

In addition, transit employees are on the front line in our Nation's effort against terrorism. They are the first responder evacuation teams who will assist in getting the public out of critical incident areas and our cities in the event of a terrorist attack. This was evident on September 11, 2001, when public transportation in New York City, New Jersey and Washington, D.C. helped safely evacuate citizens from center cities. Indeed, this same story was true around the country as transit systems quickly and efficiently evacuated people from closed airports and downtown areas. We remember that the interstate highway program was begun by President Eisenhower as a national defense interstate highway program. It is clear now that public transportation too has a significant national defense component and is a fundamental element in responding to community disasters and emergencies.

In that connection, APTA is honored to play a critical role in transportation security, and works closely with a number of Federal agencies in this regard, notably the Federal Transit Administration (FTA) and the Federal Railroad Administration of the U.S. Department of Transportation, and the Transportation Security Administration (TSA), the Office of Domestic Preparedness (ODP), and the Directorate of Information Analysis & Infrastructure Protection of the U.S. Department of Homeland Security. At the program level, APTA works closely with these agencies to administer an industry audit program that oversees a system safety and security management plan for transit systems around the country. Our safety audit program for commuter rail, bus, and rail transit operations has been in place for many years, and includes elements specific to security planning and emergency preparedness. Separately, in connection with Presidential Decision Directive Number 63, we are pleased to have been designated a Public Transportation Sector Coordinator by the Department of Transportation, and as my testimony notes below, we have established a Transit Information Sharing Analysis Center that provides a secure two-way reporting and analysis structure for the transmission of critical alerts and advisories to transit agencies around the country.

Since the events of 9/11, state and local public transit agencies, like all state and local entities, have spent significant sums on police overtime, enhanced planning and training exercises, and capital improvements related to security. In response to a 2004 APTA survey, transit agencies around the country have identified in excess of $6 billion in transit security needs. These include both one-time capital investments and recurring operating expenses related to security. It is important to note that these costs are above and beyond the capital infrastructure needs we have identified under the TEA 21 reauthorization effort.

Background

Mr. Chairman, prior to and following September 11, 2001—the date of the most devastating terrorist attack in U.S. history—APTA has played a key role in addressing the safety and security issues of our country. American public transportation agencies have also taken significant measures to enhance their security and emergency preparedness efforts to adjust to society's new state of concern. Although agencies had a wide range of security initiatives in place at the time of the World Trade Center and Pentagon attacks and already had developed emergency response plans, the September 11 incidents focused, strengthened and prioritized security efforts throughout the industry.

Transit agencies have had a good safety record and have been working for many years to enhance their system security and employee security training, partly responding to government standards, APTA guidelines, and by learning through the attacks on transit agencies abroad. For example, the 1995 sarin gas attack in the Tokyo subway system caused U.S. transit properties managing tunnels and underground transit stations to go on high alert. The San Francisco Bay Area Rapid Transit District, for instance, responded to the possible threat of chemical weapons attacks by sending a police team to Fort McClellan, Alabama, to learn response tactics from U.S. Army chemical weapons experts.

In the months following the September 11 terrorist attacks, transit agencies of all sizes worked to identify where they might be vulnerable to attacks and increased their security expenses for both operations and capital costs. The agencies subsequently upgraded and strengthened their emergency response and security plans and procedures, taking steps to protect transit infrastructure and patrons and increase transit security presence while giving riders a sense of security.

Some initiatives around the country include:

- Increased surveillance via closed circuit TV
- Increased training for employees
- Hired more police, K–9 units added
- Chemical detection systems being tested
- Infrastructure design to eliminate hiding places
- Drills are routinely held with first responders
- Encouraging riders to be vigilant for suspicious activities or items.

After September 11, many transit organizations worked to prevent unauthorized entry into transit facilities. The need for employees and passengers to stay alert and report suspicious occurrences became a key goal of many agencies. These efforts are paying off. While many transit agencies are more secure than prior to September 11, more needs to be done.

Since the attacks, APTA and the Federal Transit Administration have emphasized the need for effective transit security and emergency preparedness. FTA has sent security resources toolkits to transit agencies; completed security-vulnerability assessments of the Nation's largest transit systems; and provided technical support and grants of up to $50,000 to fund agency emergency drills.

FTA continues to provide emergency preparedness and security forums nationwide. In emphasizing the importance of enhancing transit security, FTA Administrator Jennifer L. Dorn noted that thousands of lives were spared on September 11 in New York City and Washington "because of the quick action of first responders and transit workers."

APTA has launched many additional efforts to further transit industry security and preparedness, collaborating with FTA in developing emergency preparedness forums, and sponsoring and organizing security-related conferences and workshops. Moreover, APTA developed a list of critical safety and security needs faced by the transit industry, which it has provided to the Department of Transportation and the U.S. Congress. Mr. Chairman, I would be pleased to submit this and other data discussed in my testimony for the record.

Public Transportation Information Sharing Analysis Center (ISAC)

Presidential Decision Directive #63 authorizes and encourages national critical infrastructures to develop and maintain ISACs as a means of strengthening security and protection against cyber and operations attacks. APTA is pleased to have been designated a public transportation Sector Coordinator by the U.S. Department of Transportation, and in that capacity has received a $1.2 million grant from the Federal Transit Administration to establish a transit ISAC. APTA recently formalized an agreement with a private company to implement the ISAC and make it available to public transit systems around the country.

This ISAC for public transit provides a secure two-way reporting and analysis structure for the transmission of critical alerts and advisories as well as the collection, analysis and dissemination of security information from transit agencies. The public transit ISAC also provides a critical linkage between the transit industry, the U.S. Department of Transportation, the Transportation Security Administration, and the Office of Homeland Security. A request for funding to continue this ISAC has been submitted to the Department of Homeland Security's Directorate of Information Analysis & Infrastructure Protection.

Ongoing Transit Security Programs

Mr. Chairman, while transit agencies have moved to a heightened level of security alertness, the leadership of APTA has been actively working with its strategic partners to develop a practical plan to address our industry's security and emergency preparedness needs. Shortly after the September 11 events, the APTA Executive Committee established a Security Task Force under the leadership of Washington Metro's CEO, Richard A. White. The APTA Security Task Force has established a security strategic plan that prioritizes direction for our initiatives. Among those initiatives, the Task Force serves as the steering group for determining security projects that are being implemented through over $2 million in Transit Cooperative Research funding through the Transportation Research Board.

Through this funding, APTA held four transit security workshop forums for the larger transit systems with potentially greater risk exposure. These workshops provided confidential settings to enable sharing of security practices and applying methodologies to various scenarios. The outcomes from these workshops were made available in a controlled and confidential format to other transit agencies unable to attend the workshops. The workshops were held in New York, San Francisco, Atlanta, and Chicago.

In partnerships with the Transportation Research Board, the APTA Security Task Force has also established two TCRP Panels that identified and initiated specific projects developed to address *Preparedness/Detection/Response to Incidents* and *Prevention and Mitigation.* The Security Task Force emphasized the importance for the research projects to be operationally practical.

In addition to the TCRP funded efforts, a generic *Checklist For Transit Agency Review Of Emergency Response Planning And System Review* has been developed by APTA as a resource tool and is available on the APTA website. Also through the direction of the Security Task Force, APTA has reached out to other organizations and international transportation associations to formally engage in sharing information on our respective security programs and directions and to continually work towards raising the bar of safety and security effectiveness.

Within this concept of partnership and outreach, APTA also continues in its ongoing collaboration with the Federal Transit Administration to help in guiding and developing FTA programs. Among these are regional Emergency Preparedness and Security Planning Workshops that are currently being delivered through the Volpe Center and have been provided in numerous regions throughout the U.S. The primary focus of such workshops has been to assist particularly smaller transit systems in building effective emergency response plans with first responders and their regional offices of emergency management. Also within this partnership, APTA has assisted the FTA and the National Transit Institute in the design of a new program "Security Awareness Training for Frontline Employees and Supervisors." This program is now being provided by NTI to transit agencies throughout the Nation.

Collaborative efforts between APTA, FTA, Volpe Center, and the National Transit Institute are also underway to establish a joint website that will specifically gather and disseminate effective transit practices with initial emphasis on safety and security.

As you may be aware, APTA has long-established Safety Audit Programs for Commuter Rail, Bus, and Rail Transit Operations. Within the scope of these programs are specific elements pertaining to *Emergency Response Planning and Training* as well as *Security Planning.* In keeping with our industry's increased emphasis on these areas, the APTA Safety Audit Programs have similarly been modified to place added attention to these critical elements.

APTA's Committee on Public Safety, continues to provide a most critical forum for transit security professionals to meet and share information, experiences and programs and to also provide valuable input to programs being developed by the FTA.

Security Investment Needs

Mr. Chairman, after the awful events of 9/11, the transit industry invested some $1.7 billion in enhanced security measures building on the industry's considerable

efforts already in place. At the same time, our industry undertook a comprehensive review to determine how we could build upon our existing industry security practices. This included a range of activities, some of which I discussed earlier in my testimony, including research, best practices, education, information sharing in the industry, surveys and the like. As a result of those efforts we are now at a phase where we know what we can most effectively do in terms of creating a more secure environment for our riders, and have accordingly identified critical security investment needs.

Our latest survey of public transportation security identified needs of at least $5.2 billion in additional capital funding to maintain, modernize, and expand transit system security functions to meet increased security demands. Over $800 million in increased operating costs for security personnel, training, technical support, and research and development have been identified, bringing total additional transit security funding needs to more than $6 billion.

Responding transit agencies were asked to prioritize the uses for which they required additional Federal investment for security needs. Priority examples of operational needs include:

Funding current and additional transit agency and local law enforcement personnel.

Funding for over-time costs and extra security personnel during heightened alert levels.

Training for security personnel.

Joint transit/law enforcement training.

Security planning activities.

Security training for other transit personnel.

Priority examples of security capital investment needs include:

Radio communications systems.

Security cameras on-board transit vehicles and in transit stations.

Controlling access to transit facilities and secure areas.

Automated vehicle locator systems.

Security fencing around facilities.

Transit agencies with large rail operations also reported a priority need for Federal capital funding for intrusion detection devices.

To date the DHS has allocated some $115 million for public transportation security through its Office of Domestic Preparedness, and we appreciate this support from the Department. We trust that we can now begin to build on those initial investments and address the $6 billion in critical needs the transit industry has identified; the Administration's FY 2005 budget, however, does not specifically call for investment in public transportation security. We think it should. Currently ODP grants for transit systems are made available through the states, which means that our transit systems do not have a direct relationship with DHS, and which also means that the process of getting the funds to the local transit systems can be lengthy. Mr. Chairman, our Nation's transit systems have a direct and cooperative working relationship with DOT's Federal Transit Administration which allocates Federal capital investment quickly to the local level, and we believe this is an excellent model that we would like to see developed over time with the DHS. We stand ready to help in any way we can in that regard.

Conclusion

Mr. Chairman, in light of our Nation's heightened security concerns post-9/11, we believe that increased Federal investment in public transportation security by DHS is critical. The public transportation industry has made great strides in transit security improvements since 9/11 but much more needs to be done. We look forward to building on our cooperative working relationship with the Department of Homeland Security and Congress to begin to address these needs. We again thank you and the Committee for allowing us to testify today and your commitment in the Nation's transportation infrastructure, and look forward to working with you on safety and security issues.

The CHAIRMAN. [presiding]: Thank you very much.
Mr. O'Connor, welcome.

STATEMENT OF JOHN O'CONNOR, CHIEF OF PATROL, NATIONAL RAILROAD PASSENGER CORPORATION

Mr. O'CONNOR. Thank you, Senator, Mr. Chairman. Thank you for the opportunity to provide comment and information on matters involving rail security in the United States. I am here representing Ron Frazier, my boss, who is Chief of the Department, who could not be here due to the sudden passing of his mother.

The CHAIRMAN. Please extend our sympathy.

Mr. O'CONNOR. I will.

First a few comments about Amtrak and the police and security department. Amtrak is the Nation's only intercity passenger rail transportation company and operates over 300 trains per day over some 22,000 miles of rail, with approximately 540 stations in 46 states. Amtrak carried over 24 million passengers last year and, like rail transportation systems worldwide and mass transit systems in the United States, Amtrak functions in a very open transportation environment.

Because of advantages such as easy access, convenient locations, and intermodal connections, rail and mass transit systems are completely different from the structure and organization of the airline transportation and airport industry. As a result, the security framework that works ideally in the airport setting is not transferable to the rail transportation system.

A prime example of this dichotomy can be observed by looking at the Amtrak service routes. In Penn Station, New York, there are literally hundreds of thousands of people using the facility on a daily basis, with passengers boarding and unboarding trains that are operated by Amtrak, Long Island Railroad, and New Jersey Transit. Penn Station is a vast, bustling intermodal transportation facility with detailed passenger planning coordinated with the dispatch, arrival, and departure of trains on a minute by minute precision basis. In addition, Amtrak also has numerous stations that are unmanned or are merely platforms that are located throughout its national service route.

Because of this diverse and complex organization, any delays built into this framework with security regulations would drastically affect the operation of rail transportation and the valued openness of its environment. While this certainly presents a formidable security challenge here in the United States, as well as in other countries throughout the world, these elements are the key reasons why rail and mass transit systems remain as popular and useful transportation modes.

The Amtrak police department has 342 sworn officers, with most of its security force located in the Northeast Corridor, where Amtrak runs and operates the tracks and infrastructure. In 1992, it received the distinction of being the first national law enforcement agency accredited by the prestigious Commission on Accreditation of Law Enforcement Agencies, and has been re-accredited in 1997 and 2002.

The department has oversight responsibility for the planning, assessment, and evaluation of Amtrak's passenger, critical infrastructure, and station security emergency response plans and operations. Though the Amtrak police department has operated as a traditional police force that did not focus on counter-terrorism,

since September 11, 2001, our department has worked to develop terrorism-based vulnerability and threat assessments, emergency response and evacuation plans, as well as security measures that address not only vandalism and other forms of street crime, but the potential for explosion and blast effects at critical infrastructure locations.

Amtrak has also developed a security threat level response plan that mirrors the homeland security advisory system and requires Amtrak to engage in specific security countermeasures according to the existing threat level.

To effectively engage in these responsive measures, Amtrak also created a security coordinator program. Within each Amtrak division, a security coordinator closely works with Amtrak police and security personnel to review the security components and steps under the threat level response plan and to ensure that employees within their divisions are undertaking the required steps.

Amtrak reinforces security measures and guidelines through this program and has also established a security information center to increase employee awareness about security issues and to directly provide security tips, bulletins, and specific information on security policies and procedures.

Amtrak has also increased its K–9 patrols by adding 12 explosives detection K–9 teams to conduct random sweeps of baggage rooms, train platforms, and stations. The police department has also purchased full-face respirators for all sworn personnel and deployed these devices for Amtrak's first responders to protect against a chemical, biological, or radiological attack.

In major stations, gamma and neutron radiological detectors have also been deployed to address radiological threats.

Finally, Amtrak has instituted a practice of conducting random photo identification for passengers purchasing tickets and instituted a plan for placing weight restrictions on baggage at certain levels of heightened security.

As part of its ongoing efforts, the Amtrak police department does budget for elevations in the Homeland security advisory system because manpower costs during the orange level alert are roughly $11,000 per day. However, there have been so many days this Fiscal Year already at this alert level that Amtrak is coming close to surpassing its reserve budget, while such a focus on counterterrorism makes Amtrak less effective in providing general police service to its travelers and station users.

Though Amtrak continues to prepare to prevent an attack on our rail system, we also recognize we must stand ready to manage an incident if and when there is some form of an attack. Through our Office of Emergency Preparedness, we conduct training for first responders, over 21,000 so far, situated along the Amtrak service route. We have purchased a public safety database which lists each police, fire, and emergency rescue agency in order to facilitate State and local emergency response and to establish a clear record of agency training.

The Amtrak police and security department also has developed close working relationships with our Federal partners at DHS, TSA, in particular with Mr. Chet Lunner, Under Secretary there or Assistant Administrator; the DOT; and the FRA, Bill Fagan

from the security department, to ensure that effective communications exist and our security efforts are coordinated.

Amtrak is working with the FRA to arrange for and conduct blast vulnerability studies of train equipment and is working with DHS, FRA, and TSA to develop a basic security awareness training course for all Amtrak employees. There have also been numerous collaborations with the above agencies that address rail security matters. Some of these initiatives include the land transportation and anti-terrorism training that was provided by FLETC, the Federal Law Enforcement Training Center, to Amtrak police personnel and security coordinators, as well as two emergency response drills in which scores of Federal, State and local agencies conducted exercises related to a terrorist incident. All these initiatives were sponsored by the TSA.

Amtrak has detailed its immediate and critical security needs in a confidential plan to the TSA. While not being able to identify funding at this time, TSA has generally approved the basic concept and approach of the plan. The plan calls for approximately $110 million in funding, with another 10 to $12 million per year in recurring operating costs. The general concerns cited in the plan are as follows:

Security for Amtrak's largest stations. The Amtrak plan cites the need to continue to upgrade its security at its four largest stations, as well as nonpublic locations such as loading docks, adjacent yards and buildings.

Tunnel security. The plan would secure all tunnel access points and improve security for trains traveling through tunnels throughout the Northeast Corridor. This would be in addition to the fire and life safety program under way in the North and East River Tunnels under New York City, for which $100 million——

The CHAIRMAN. Mr. O'Connor, we would like you to summarize if you can.

Mr. O'CONNOR. Certainly.

Finally, Amtrak strongly suggests that Congress enable rail police to have access to the same forms of funding initiatives as similarly situated mass transit police agencies. Recently, $50 million in security grants were made available to mass transit law enforcement agencies by the Department of Homeland Security. These grants are available to the other departments, but currently there is no enabling legislation to allow Amtrak access to those funds.

[The prepared statement of Mr. Frazier follows:]

PREPARED STATEMENT OF E. R. FRAZIER, SR., ESQ., CHIEF OF POLICE AND SECURITY DEPARTMENT, AMTRAK

Mr. Chairman and Members of the Senate Commerce, Science and Transportation Committee, I would like to thank this Committee for the opportunity to provide comment and information on matters involving rail security in the United States.

First, however I believe that it may be helpful for the Committee to know a little about Amtrak and its Police and Security Department. Amtrak is the Nation's only intercity passenger rail transportation company and operates over 300 trains per day over some 22,000+ miles of rail with approximately 540 Stations in 46 states. Amtrak carried over 24 million passengers in the last fiscal year. Like rail transportation systems worldwide and mass transit systems in the United States, Amtrak functions in a very "open" transportation environment. Because of advantages such as easy access, convenient locations and intermodal connections, rail and mass transit systems are completely different from the structure and organization of the air-

line transportation and airport industry. As a result, the security framework that works ideally in the airport setting is not transferable to the rail station system.

A prime example of this dichotomy can be observed by looking at the Amtrak service route. In Penn Station, New York there are literally hundreds of thousands of people using the facility on a daily basis with passengers boarding and unboarding trains that are operated by Amtrak, LIRR and New Jersey Transit commuter trains. Penn Station is a vast, bustling intermodal transportation facility with detailed passenger planning coordinated with the dispatch, arrival and departure of trains on a minute-by-minute precision basis. In addition, Amtrak also has numerous stations that are unmanned or are merely platforms that are located throughout its national service route. Because of this diverse and complex organization, any delays built into this framework with security regulations would drastically affect the operation of rail transportation and the valued openness of its environment. While this certainly presents formidable security challenges here in the United States as well as in other countries throughout the world, these elements are also the key reasons why rail and mass transit systems remain as popular and useful transportation modes.

The Amtrak Police Department has 342 sworn officers with most of its security force located in the Northeast Corridor where Amtrak runs and operates the tracks and infrastructure. In 1992, it received the distinction of being the first national law enforcement agency accredited by the prestigious Commission on Accreditation of Law Enforcement Agencies (CALEA) and has been reaccredited in 1997 and 2002. The Department has oversight responsibility for the planning, assessment and evaluation of Amtrak's passenger, critical infrastructure, and station security, emergency response plans and operations.

Though the Amtrak Police Department is a traditional police force that does not focus on counter terrorism, since September 11, 2001, our department has worked to develop terrorism-based vulnerability and threat assessments, emergency response and evacuation plans, as well as security measures that address not only vandalism and other forms of street crime but the potential for explosion and blast effects at critical infrastructure locations. Amtrak has also developed a Security Threat Level Response Plan (ASTLRP) that mirrors the HSAS and requires Amtrak to engage in specific security countermeasures according to the existing threat level. To effectively engage in these responsive measures, Amtrak also created a Security Coordinator Program. Within each Amtrak division, a Security Coordinator works closely with Amtrak Police and Security personnel to review the security components and steps of the ASTLRP and to ensure that employees within their division are undertaking the required steps. Amtrak reinforces security messages and guidelines through this program and has also established a Security Information Center to increase employee awareness about security issues and to directly provide security tips, bulletins and specific information on security policies and procedures.

Amtrak has also increased its police canine patrols by adding twelve explosive detection canine teams to conduct random sweeps of baggage rooms, train platforms and stations. The Police Department has also purchased full-face respirators for all sworn personnel and deployed these devices for Amtrak's first responders to protect against a CBR attack. In major stations, gamma/neutron radiological detectors have also been deployed to address radiological threats. Finally, Amtrak has instituted a practice of conducting random photo identification for passengers purchasing tickets and instituted a plan for placing weight restrictions on baggage at certain levels of heightened security.

As part of its ongoing security efforts, the Amtrak Police Department does budget for elevations in the HSAS because manpower costs during an "Orange" level alert are roughly $11,000 per day. However, there have been so many days this Fiscal Year already at this alert level that Amtrak is coming close to surpassing its reserve budget. Also, such a focus on counter terrorism makes Amtrak less effective in providing its general police service to its travelers and stations users.

Though Amtrak continues to prepare to prevent an attack on our rail system, we also recognize that we must stand ready to manage an incident if and when there is some form of attack. Through our Office of Emergency Preparedness we conduct training for first responder agencies (over 21,000) situated along the Amtrak service route. We have purchased a public safety database that lists each police, fire and emergency rescue agency in order to facilitate state and local emergency response and to establish a clear record of agency training. The Amtrak Police and Security Department has also developed close working relationships with our Federal partners: DHS, TSA, DOT, and FRA to ensure effective communications exist and that our security efforts are coordinated.

Amtrak is working with FRA to arrange for and conduct blast vulnerability studies of train equipment and is working with DHS, FRA and TSA to develop a basic

security awareness training course for all Amtrak employees. There have also been numerous collaborations with the above agencies that address rail security matters. Some of these initiatives include Land Transportation Anti-terrorism training that was provided by FLETC to Amtrak Police personnel and its Security Coordinators as well as two emergency response drills in which scores of federal, state and local agencies conducted exercises related to a terrorist incident. All of these initiatives were sponsored by TSA.

Amtrak has detailed its immediate and critical security needs in a confidential plan to the TSA. While not being able to identify funding at the time, TSA has generally approved the basic concept and approach of the plan. The plan calls for approximately $110 Million in funding with another $10–12 million per year in recurring operating costs. The general concerns cited in the plan are as follows:

- *Securing Amtrak's Largest Stations*—Amtrak's plan cites the need to continue to upgrade its security at its four largest stations as well as at non-public locations, such as loading docks, adjacent yards and buildings.
- *Tunnel Security*—The plan would secure all tunnel access points and improve security for trains traveling through tunnels throughout the NEC. This would be in addition to the fire and life safety program underway in the North and East River tunnels under New York City for which $100 million was appropriated in 2002.
- *Amtrak Tracking, Communications and Critical Incident Response* – Amtrak possesses several Dispatch, Command and Control Centers that require redundancy and centralization. Further, while Amtrak can effectively track train movements within the Northeast Corridor, it is unable to do so throughout the rest of the national system. The plan would address both of these needs.
- *Anti-Terrorism Screening*—Presently, this project is in collaboration with DHS/TSA and ICE to upgrade the manner in which international passenger information is provided to border inspection forces. It is also anticipated that the Amtrak Police and Security Department will become more involved as a law enforcement agency in a "watchlist" technology when TSA identifies and approves a suitable identification system.

It is imperative that Amtrak, in conjunction with TSA and all other related agencies, be able to address the aforementioned rail security concerns as soon as possible. Amtrak has provided this security plan to its Authorizing and Appropriations Committees of jurisdiction and stands ready to work with Congress and the Department of Homeland Security.

Finally, Amtrak strongly suggests that Congress enable rail police to have access to the same forms of funding initiatives that similarly situated mass transit police agencies have. Recently, $50 million in security grants were made available to mass transit law enforcement agencies by the Department of Homeland Security. These grants addressed first responder issues and could be helpful to rail police who also patrol passenger stations and protect critical infrastructure. Because rail police do not fall under the classification of "state or local law enforcement", however, we remain ineligible. We therefore ask that this be changed since rail police share the same front line as its mass transit partners and need to act and communicate in the same fashion as law enforcement throughout the United States in this time heightened alert.

Thank you for this opportunity to provide testimony to the Committee.

The CHAIRMAN. Thank you very much.

Senator Hutchison.

Senator HUTCHISON. Thank you.

I would like to go back to the rail security—the freight rail security at the ports. I would like to ask you, Mr. Hamberger, if you are satisfied from your industry standpoint with the progress that is being made at rails that feed into ports. Particularly, I have to mention the ports where there are chemical complexes, and if you think—if you do not think that enough is being done, what do you think the next step should be?

Mr. HAMBERGER. I would like to answer that in more detail in writing if I can. But at this point at the ports we primarily coordinate with the Coast Guard and adhere to the Coast Guard requirements. As far as the security for the containers themselves, that

is, I understand, being addressed further up the supply chain. So that by the time those containers, for example, come to the railroads to be pulled whatever security they have gone through has already been accomplished.

At the land borders, however, between Canada and Mexico, there are VACUS machines, which is an acronym that stands for something, but basically they are gamma ray machines that do inspect the contents of the containers as they come across from Canada and Mexico. Of course, there has to be advanced notification as well of the consist. I believe it is 4 hours before it gets to the port under the Customs regulation.

So, I am a little bit more familiar with that than I am with what happens at the deepwater ports. So if I could respond in more detail in writing, I would appreciate that.

Senator HUTCHISON. Do you think the containers go through the same rigorous security coming from another foreign country besides Mexico or Canada.

Mr. HAMBERGER. Like I say, I really cannot speak to that. I do not know the answer to that.

Senator HUTCHISON. Mr. Riley.

Dr. RILEY. I can comment a little bit.

Senator HUTCHISON. Doctor Riley.

Dr. RILEY. Yes. We are capturing and doing better in terms of prescreening an increasing portion of the containers through a couple of different programs. CTPAT, the Customs Trade Partnership Against Terrorism, which helps link up high volume ports that send goods to our ports and some prescreening; and then CSI, the Container Security Initiative, which uses intelligence and other pieces of information to identify high priority containers and cargo for deeper inspection.

The combination of those programs with the increased physical screening of containers once they reach U.S. ports is not only leading to increases in port security, but also I think has positive spillover effects for the rail system since such a very high proportion of the goods that are shipped by rail come out of ports.

Senator HUTCHISON. So you think progress is being made?

Dr. RILEY. Progress is definitely being made. I would liken it to the following analogy. If you harken back to the original terrorist attacks against aircraft, not on September 11, 2001, but back in the 1960s and early 1970s when the hijackings started, we had to reconceptualize how we thought about airline and airport security. We started with things like screening passengers, physical setbacks for aircraft, and a variety of different security mechanisms.

It takes a long time to transform a system as complicated as air traffic. It takes an even longer time to transform a system as complicated as port and rail security. But I do believe that fundamental transformation is in process and well under way.

Senator HUTCHISON. Let me just say that one of the problems that I have had for the last year is air cargo security, that we have not secured our air cargo nearly to the extent that we have secured baggage and passengers in the top of the airplane. The Senate has passed a bill twice that would put in place air cargo security measures, and yet it has not yet passed the House and so is not in place.

So let me ask you on rail cargo, not necessarily foreign rail cargo coming into ports, but I would like to ask both Dr. Riley and Mr. Hamberger: Are you satisfied that we have a good security system in place for rail cargo that is domestically transported?

Mr. HAMBERGER. Yes, I believe that we do. I believe that, working with again the Chlorine Institute, working with the American Chemistry Council, to address your specific chemistry concerns, we have really dovetailed, particularly with the Chlorine Institute, our plan with their plan to try to address any hole in the logistics chain.

So I believe that we have a pretty well-coordinated effort ongoing, and also with the American Chemistry Council, to address the broader range of hazardous materials that we transport.

Senator HUTCHISON. Dr. Riley?

Dr. RILEY. I would echo those comments, and I would also harken back to how I summarized my testimony, which is: Without those threat and vulnerability assessments, we really do not know where the biggest gaps are and what the highest priorities should be. So those really are critical elements to understanding how our resources should be allocated.

Senator HUTCHISON. Well, thank you, Mr. Chairman. My time is just about up, but I appreciate your holding this hearing, changing the hearing last week to rail security after what happened in Madrid, because I think it is long overdue. I would just hope that all of our panelists would tell us what kind of act we should pass to assure rail security, and I am pleased that we are having a port security hearing tomorrow because I think that that is the other area that has not been fully addressed.

Thank you.

The CHAIRMAN. Thank you, Senator Hutchison. I thank you for the active role you have played on this issue and I look forward to working with you as we try to produce another piece of legislation and mark it up as quickly as possible on rail security.

Thank you.

Mr. Hamberger, do you agree with Senator Hutchison's assessment that we have got to have an overall threat assessment and prioritize here?

Mr. HAMBERGER. Well, Mr. Chairman, we have tried to address that internally with our study, with our threat assessment. That has been shared with the Federal Railroad Administration, the Department of Transportation, Transportation Security Administration, DHS, and it is an ongoing effort. The risks, the threats always change, and so I think—I would hope that we could build upon that, not recreate the wheel but use the work that the industry has done and then go forward to build upon that.

So I think that the effort is always worthwhile, yes.

The CHAIRMAN. Let me get with all the witnesses just on this issue of priorities. If the priority is where the greatest vulnerability is, would that argue that the tunnels are a high priority? Beginning with you, Dr. Riley? And the concentration of people and traffic on the eastern corridor? Or would you argue that perhaps the rail system from Dallas to Houston, which is a major area, would also—in other words, how are we going to sort this out?

We are not going to be able to address every area all at the same time. This is what I think we are going to be wrestling with as we try to shape some meaningful legislation and assist in this effort.

We will begin with you, Dr. Riley, and go down.

Dr. RILEY. Not to sound like a broken record, but those threat and vulnerability assessments are critical because, while organizations like AAR have done an outstanding and very proactive job within their sector, one of the things that we really cannot do at this point is compare across freight, passenger, and infrastructure vulnerabilities to draw up that list.

Subject to that caveat that there is no master threat and vulnerability analysis that lets us sit back, I do believe that the tunnels and the passenger corridors and the subway systems in the high priority cities that were identified earlier today are probably the places to begin.

The CHAIRMAN. Mr. Hamberger?

Mr. HAMBERGER. Mr. Chairman, we have identified 1,308 critical assets. We have them prioritized 1 through 1,308.

The CHAIRMAN. Submit those for the record, please.

Mr. HAMBERGER. They are classified, but to the extent we can do that we would do that, yes, sir.

The CHAIRMAN. All right. If they are classified, then do not submit them for the record.

Mr. HAMBERGER. We have shared that, of course, with DHS, and as the threat level goes up we have tried to deploy our assets as far down that list as we can. We compiled that list based upon three criteria: one, what would the threat be to the economy; two, what would the threat be to population; and three, what would the threat be to military transportation?

Using the overlay of those three analyses, we prioritized our assets. You may be surprised to know that tunnels are not near the top. In fact, tunnels from our standpoint are relatively easy to recover from. What is not easy to recover from are bridges that link important sections of the country. So we have identified bridges that we have worked with the Department of Homeland Security on to provide a hardening of those assets, both at current levels of protection and alert and higher levels of alert.

The CHAIRMAN. Well, that is very interesting. I would like to see your unclassified argument that bridges are a very high priority.

Mr. HAMBERGER. Based to a large extent on the ability to recover from the damage.

The CHAIRMAN. Mr. Millar.

Mr. MILLAR. Yes. In our survey that I spoke of in my testimony, we asked our members responding to the survey to prioritize the areas that they see funding. In general, two types of funding. One I would describe as one time only, capital investments. The priorities in this area were as follows: modern, up-to-date and coordinated radio communications systems; security cameras on board transit vehicles and throughout transit stations.

Number three would be controlling access to the facilities and secure areas, and that would include tunnels.

Number four was automatic vehicle locator systems, so we would always know, particularly in the bus area, where the vehicles were.

Number five was increased security fencing around facilities.

Within the operating area, there were six top priorities. I do not think any of these are surprises. We have heard them here today in the testimony, and they relate to mostly personnel costs, particularly law enforcement, and additional transit agency costs, especially during the times of heightened alerts; additional costs for training personnel, particularly joint training between people in our industry and the first responder community outside our industry; security planning activities and security training for other transit personnel other than the police and security.

So I am not sure any of these are big surprises, but very clearly those are the priorities, and when we have completed our analysis of our study I will submit it to the Committee, including the priorities and the listing of more detailed priorities within each of these categories.

The CHAIRMAN. How soon will you have that?

Mr. MILLAR. We expect to have it early in April. I can certainly try to get you something before that, though. It sounds like you are on a faster timetable than that.

The CHAIRMAN. Well, we are trying to mark something up within a couple of weeks, so that brings us into April. And then I would not think we would have floor consideration right away, so we do have some leeway. But we feel that would be important information for us.

Mr. MILLAR. Thank you, sir. As early as I can, I will get it to you within the next couple of weeks then.

[The information referred to follows:]

Public Transportation Security Initiatives

April 5, 2004

American Public Transportation Association
1666 K Street, N.W.
Washington, DC 20006
(202) 496-4800

APTA is a nonprofit international association of over 1,500 public and private member organizations including transit systems and commuter rail operators; planning, design, construction and finance firms; product and service providers; academic institutions; transit associations and state departments of transportation. APTA members serve the public interest by providing safe, efficient and economical transit services and products. Over ninety percent of persons using public transportation in the United States and Canada are served by APTA members.

PUBLIC TRANSPORTATION SECURITY INITIATIVES
(4/5/04)

APTA

*System Safety Program Plan standards for bus, rail and commuter rail operations
(note- these standards include elements specific to security and emergency preparedness)
*APTA Committees....Rail Safety/ Bus Safety/ Committee On Public Safety (security)
and the APTA Executive Committee Security Task Force
*APTA sponsored security workshops and conference sessions
*APTA *Passenger Transport* security-related articles
*APTA web-site
*APTA Safety-Security list-server
*Public Transit ISAC
*Sharing best practices
*APTA Peer Reviews
*Support through APTA staff

National Transit Institute

*Security Awareness Training for Transit Employees
*Violence In The Workplace

Transportation Safety Institute Courses

*Transit System Safety
*Transit System Security
*Weapons of Mass Destruction

John A. Volpe Center

*Connecting Communities (emergency response planning toolkit)
*Security Design Guidelines for Transit Facilities & Vehicles (currently being completed)

FTA

(resources developed in consultation with APTA and industry)

***Security Threat Level Guidelines**
***Security Action Guidelines (20 actionable activities)**
***Guidelines for Managing Chemical and Biological Events in Rail Transit Tunnels**
(this is a controlled document currently being updated)
***Guidelines for Managing Improvised Explosive Incidents In Bus Operations**
(this is a controlled document)
***Security Vulnerability Assessments (provided to 37 agencies)**
***Emergency Preparedness Drills (funding provided to 85 agencies)**
***Security Technical Assistance**
***National Transit Watch Program**
***Security Forums for Transit Security Chiefs and Police Chiefs**

Transit Cooperative Research Program

***$2 million in funding provided to 14 transit security-focused issues related to Prevention and Mitigation/ Preparedness and Response.**
***Partnership with APTA in conducting 4 national security forums**
***Partnership with APTA in conducting an International Security Summit**
***Industry Security Roundtables**
***International Security Summit**

Federal Law Enforcement Training Center

***Development and provision of course on Land Transportation Anti-Terrorism Training**

Mineta Institute

***Partnership with APTA in conducting Transportation Security Summit**

TRB TRANSPORTATION RESEARCH BOARD
OF THE NATIONAL ACADEMIES

Cooperative Research Programs
Security Research
April 1, 2004

Emergencies arising from terrorist threats highlight the need for transportation managers to minimize the vulnerability of people and assets through incident prevention, preparedness, response, and recovery. Managers are seeking to reduce the chances that transportation vehicles and facilities are targets or instruments of terrorist attacks and to be prepared to respond to and recover from such possibilities. The Transit Cooperative Research Program has budgeted $2.75 million for security-related research in FY 2002 through FY 2004 (see www4.trb.org/trb/crp.nsf/All+Projects/TCRP+J-10). The National Cooperative Highway Research Program has budgeted $5.925 million in FY 2002 through FY 2005 for security-related research (see www4.trb.org/trb/crp.nsf/All+Projects/NCHRP+20-59).

Although a wealth of new resources is now available or under development through the cooperative research programs, TRB and the National Academies have generated extensive information on these issues in recent years. The TRB Transportation System Security website (www4.trb.org/trb/homepage.nsf/web/security) brings together much of this information. Also included are links to other related websites that contain discussions of issues, actions which can be taken, guidance, and training opportunities. The TRB Transportation System Security website is sponsored by the TRB Committee on Critical Transportation Infrastructure Protection (san-antonio.tamu.edu/trba5021/trba5021.html) and is updated regularly.

The AASHTO Task Force on Transportation Security (shortly to become the Special Committee on Transportation Security) and the APTA Executive Committee Security Task Force continue to provide steering direction to the Cooperative Research Programs Security Research under NCHRP and TCRP, respectively. Technical panels provide oversight and project selection guidance for NCHRP through Project Panel 20-59 Surface Transportation Security Research and for TCRP through Project Panels J10A and J-10B Public Transportation Security Research.

Also included below is information on about $500,000 in security-related projects from Transit IDEA; legal studies; international studies; planning; and the Federal Motor Carrier Safety Administration (FMCSA)-sponsored CTBSSP, to provide a complete picture of the security research projects managed by the Cooperative Research Programs.

Since September 11, 2001, 56 security-related projects have been authorized in the Cooperative Research Programs: 25 of these projects have been completed; 15 projects are in progress; and 16 projects have contracts pending or are currently in development. The most recent update of this document can be found online at gulliver.trb.org/publications/dva/CRP-SecurityResearch.pdf. A slideshow relating these projects to the broader security activities of the Transportation Research Board and The National Academies can be found at www.trb.org/publications/dva/SecurityActivities.pdf

Project	Budget	Status	Description
NCHRP Project 20-6, "Legal Problems Arising Out of Highway Programs"			
20-6 Topic 13-2 Contracting Procedures During War or a Disaster	$ 25,000	In Development	Provides authoritatively researched, specific, limited-scope studies of legal issues and problems having national significance and application.
TCRP Project J-5, "Legal Aspects of Transit and Intermodal Transportation Programs"			
J-5 Topic 7-01 Transit Security Versus Civil Rights	$ 25,000	Active: Contractor's Final Report anticipated December 2004	Provides authoritatively researched, specific, limited-scope studies of legal issues and problems having national significance and application.

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Project	Budget	Status	Description
CTBSSP (Commercial Truck & Bus Safety Synthesis Program)			
CTBSSP-1 Security Measures in the Commercial Trucking and Bus Industries	$ 40,000	Complete April 2003	Synthesis study to review and summarize the terrorist-related security status and needs of the trucking and commercial bus industries. Published as Commercial Truck and Bus Safety Synthesis 2: *Security Measures in the Commercial Trucking and Bus Industries*
Transit IDEA (Innovations Deserving Exploratory Analysis)			
J-4 Transit IDEA Project 35 Innovative Bioterrorism Detection Technology for Transit Security	$ 82,000	Active: Contractor's Final Report anticipated July 2004	Conducting tests of an innovative detection technology that has shown preliminary promise for real time detection of biological organisms
J-4 Transit IDEA Project 37 Bandwidth Expansion and Real-Time Surveillance for Security on Transit Buses	$ 81,000	Active: Contractor's Final Report anticipated October 2004	Developing and testing enhanced real-time surveillance technology for security on transit buses, including remote viewing, monitoring and alerting functions at a central control room
J-4 Transit IDEA Project 40 Counter Terrorism Chemical Detector for Rail Transit Systems	$ 80,000	Active: Contractor's Final Report anticipated March 2005	Developing and designing a prototype device to detect chemical agents in subway stations and rail cars. The device will be designed to include wireless transmission to a central computer system to provide real-time warnings.
NCHRP (National Cooperative Highway Research Program)			
8-36 (34) Incorporating Security into the Transportation Planning Process: Research for the AASHTO Standing Committee on Planning	$50,000	Active: Contractor's Final Report anticipated March 2004	Documents strategies, processes, and practices for incorporating security considerations into the transportation planning process.
12-72 Blast/Impact-Resistant Highway Bridges: Effective Design Detailing	**$1,000,000**	**In development**	**Panel nominations are requested. Panel to meet in 2004.**
20-7/151A A Guide to Updating Highway Emergency Response Plans for Terrorist Attacks	$100,000	Complete May 2002	Planning guidance for state departments of transportation, incorporating the Incident Command System. Contractor's final report available on AASHTO web site
20-7/151B A Guide to Highway Vulnerability Assessment	$100,000	Complete May 2002	Guidance for state departments of transportation to identify vulnerable facilities and appropriate countermeasures. Contractor's final report available on AASHTO web site
20-7/151C Transportation Security: Sharing Information & Task Force Support	$ 50,000	Complete Continuing under 20-59(14)	Support for the AASHTO Task Force on Transportation Security
20-59(1) AASHTO Security Research Workshops and Forums	$100,000	Complete April 2003	Identification and prioritization of a research agenda for state DOTs, US DOT, and NCHRP Phase 1 report delivered to AASHTO April 2002, available on AASHTO web site. Phase 2 workshop support complete April 2003.
20-59(2) Bridge/Tunnel/Highway Infrastructure Vulnerability Workshops	$277,000	Active: Contractor's Final Report anticipated April 2004	Three regional, interactive workshops: NY, TX, CA

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Project	Budget	Status	Description
NCHRP (National Cooperative Highway Research Program)			
20-59(3) Blue Ribbon Panel on Bridge and Tunnel Security	$128,200	Complete September 2003	Expert group meeting and establishing guidelines (includes $63,200 from FHWA). Available on AASHTO web site
20-59(4) White Paper on Highway Security Issues for Reauthorization	$ 25,000	Complete April 2002	Transportation reauthorization recommendation changes due to new security needs. Contractor's final report delivered to AASHTO April 2002
20-59(5) National Needs Assessment for Ensuring Transportation Infrastructure Security	$150,000	Complete December 2002	Transportation facilities needs assessment, with recommendations to meet new security needs. Contractor's final report available on AASHTO web site
20-59(6) State DOT Field Personnel Security Manual	$ 50,000	Complete October 2003	Guidance for DOT field personnel as stand-alone document and with training programs.
20-59(6A) State DOT Field Personnel Security Training CDs	$150,000	Contract Pending	Stand-alone CD-ROM based training programs for self-instruction.
20-59(6B) Enhanced DOT Participation in NTI Train-the-Trainer Workshops for Security Awareness	$100,000	Contract Pending	The National Transit Institute has developed and delivered security awareness training for several modes. Training is available by direct delivery, in CD-based self-study, and in train-the-trainer versions.
20-59(7) Transportation Security Information Clearinghouse 20-59(7A) TSIC Outreach & Support, and Support to Panel in Developing ISAC Recommendations	$125,000 $ 60,000	Active: Contractor's Draft Report anticipated May 2004	Development and one year of operation of a web-based clearinghouse for transportation security information.
20-59(8) Emergency Transportation Operations Preparedness and Response Workshop Adaptations for Rural and International Border Crossing Situations	$195,000	Complete January 2004	Regional, interactive workshops: WA, NM, MN, ID Contractor's final report delivered to AASHTO February 2004
20-59(9) Methods for Determining Transportation and Economic Consequences of Terrorist Attacks	$250,000	Active: Final Report anticipated June 2004	Panel to meet in March 2004 to assess progress.
20-59(10) Secure Communication Infrastructure	$378,600	Active: Contractor's Final Report anticipated April 2004	Characterization and scoping of a state-based secure communication system.
20-59(11) Emergency Traffic Operations Management 20-59(11A) Emergency Traffic Operations Guide Implementation Planning	$350,000 $100,000	Active: Final Report anticipated June 2004	Guidance for State DOTs to coordinate activities with law enforcement, fire service, and emergency management.
20-59(12) Follow-up Security and Emergency Response Survey of State Transportation Agencies	$ 500	Active: Final Report anticipated June 2004	This project is a follow-up to the TRB/AASHTO November 2001 Security and Emergency Response Survey of State Transportation Agencies.
20-59(13A) Follow-up on A Guide to Updating Emergency Response Plans for Terrorist Incidents	$ 6,000	Complete November 2003	Compile comments on 20-7/151A A Guide to Updating Highway Emergency Response Plans for Terrorist Attacks

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Project	Budget	Status	Description
NCHRP (National Cooperative Highway Research Program)			
20-59(13B) Follow-up on A Guide to Highway Vulnerability Assessment for Critical Asset Identification and Protection	$ 35,000	Complete February 2004	This project is a continuation of Project 20-7/151B. It compiles user comments, including those stimulated by a presentation and a half-day workshop conducted under this project.
20-59(14) Transportation Security: Sharing Information and Task Force Support	$235,000	Active: Ongoing	Support for the AASHTO Task Force on Transportation Security (continuation of 20-7/151C)
20-59(15) AASHTO Modifications of Consultant Reports	$ 0	Not Assigned	Editorial support for converting consultant reports to AASHTO publications
20-59(16) Preparation of Educational Materials: Outreach	$ 50,000	Active: Contractor's Final Report anticipated May 2004	Materials for communicating specifically to federal agencies outside the FHWA
20-59(16A) Preparation of Educational Materials: Funding Guide	$ 50,000	Contract pending	Materials for communicating funding opportunities to state transportation agencies
20-59(17) AASHTO Guide to Risk Management of Multi-modal Transportation Infrastructure	$400,000	In development	Develop a multi-modal guide that incorporates the Transportation Security Administration risk management methodology for protecting all DOT transportation modes
20-59(18) Guidelines for Conduct of Emergency Training Drills, Simulations, and Exercises	$100,000	In development	Develop a guidebook for use by transportation systems and emergency responders in the planning, design, development, implementation, and evaluation of drills and exercises. TCRP J-10C is co-funding this project with a matching $100,000.
20-59(19) Transportation Response Options: Scenarios of Infectious Disease, Biological Agents, Chemical, Radiological or Nuclear Exposure	$200,000	Active: Final Report anticipated July 2004	Develop a series of decision support matrices that consider specific attacks and provide parameters to inform movement restrictions, considering health and safety as well as economic considerations.
20-59(20) Enhanced Communications Interoperability: Assessment of Emerging Voice/Data Integration Tools	$ 0	Cancelled December 2003	Develop a framework, guide, or service for use by the transportation community and others to prepare for the purchase or management of interoperable communications/data transmission systems and networks.
20-59(21) Transportation Agency Continuity of Operations Plans	$100,000	In development	Develop guidance for efficiently resuming transportation agency operations following a terrorist attack or other natural or man-made disasters. TCRP J-10F is co-funding this project with a matching $100,000.
20-59(22) Guidelines for Emergency Quarantine Closures of Local and State Roads	**$200,000**	**In development**	**Panel nominations are requested. Panel to meet in autumn 2004.**
20-59(23) Update of the 2002 Guide to Updating Highway Emergency Response Plans for Terrorist Incidents	**$300,000**	**In development**	**Panel nominations are requested. Panel to meet in late 2004.**
20-67 Making Transportation Tunnels Safe and Secure	**$200,000**	**In development**	**Assess the operational and structural security and safety needs of the underground transportation infrastructure. TCRP J-10G is co-funding this project with a matching $200,000.**

TRB TRANSPORTATION RESEARCH BOARD
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Project	Budget	Status	Description
TCRP (Transit Cooperative Research Program)			
J-3 (Spring 2002) Safety and Security Issues at All-Bus Systems in Small- to Medium-Sized Cities in Western Europe: International Transit Studies Program	$162,500	Complete June 2002	Brief report includes transportation information on the cities and facilities visited, lessons learned, and discussions of policies and practices that could be applied in the United States. Published as TCRP Research Results Digest 58: *Safety and Security Issues at All-Bus Systems in Small- to Medium-Sized Cities in Western Europe*
J-10(1) Transit Security Roundtables	$330,000	Complete December 2002	Brief report on four roundtables on public transportation security held January-May 2002. Contractor's final report received and delivered to APTA December 2002.
J-10(2) Security White Papers	$ 20,000	Complete August 2002	Briefs: 1) on decontamination procedures after chem/bio/radiological events; 2) technology clearinghouse options Contractor's final reports delivered to APTA August 2002.
J-10(3) A Guide to Public Transportation Security Resources	$ 5,000	Complete April 2003	Brief report on available training and research for public transportation security. Published as TCRP Research Results Digest 59: *A Guide to Public Transportation Security Resources*
J-10(4) International Transportation Associations Transit Security Summit	$ 20,000	Complete September 2002	More than 60 participants, with representatives from Belgium, Canada, France, Mexico, Spain, United Kingdom, and United States
J-10A(1) Update of Federal Transit Admin. Transit System Security Program Planning Guide and Transit Security Handbook	$150,000	Complete August 2002	Combined and updated guidance Contractor's final report and companion CD delivered to FTA August 2002. Available on FTA web site as *The Public Transportation System Security and Emergency Preparedness Planning Guide.*
J-10A(2) Security-Related Training and Customer Communications	$400,000	Complete December 2003	Best practices and new materials for training and corporate communications with the public. Publication pending.
J-10A(3) Intrusion Detection for Public Transportation Facilities	$250,000	Complete March 2003	Use of technologies and security practices for detecting and prosecuting intruders in public transportation facilities. Published as TCRP Report 86, Public Transportation Security, Volume 4: *Intrusion Detection for Public Transportation Facilities Handbook*
J-10A(4) Scan for Tools for Evaluating and Prioritizing Anti-Terrorist Security Measures for Transit Applications	$ 25,000	Complete June 2003	To determine whether the development of transit-specific tools for prioritizing security measures is necessary or appropriate for transit systems.
J-10B(1) Emergency Response Mobilization Strategies and Guidelines for Transit	$400,000	Active: Contractor's Final Report anticipated April 2004	Public transportation's role in emergency evacuation and providing staging support for emergency responders
J-10B(2) Use of Portable Explosive Detection Devices	$200,000	Complete February 2004	Evaluation of detection devices in public transportation environments. Publication is pending.

TRB TRANSPORTATION RESEARCH BOARD
OF THE NATIONAL ACADEMIES

Project	Budget	Status	Description
TCRP (Transit Cooperative Research Program)			
J-10B(3) Robotic Devices	$ 20,000	Complete December 2002	Evaluation of literature on use of robotic devices in public transportation environments, drawing on TSWG research. Published as TCRP Report 86, Public Transportation Security, Volume 3: *Robotic Devices: A Guide for the Transit Environment*
J-10B(4) Communication of Threats	$ 20,000	Complete June 2002	Guidelines for peer exchange of security threats among public transportation providers Published as TCRP Report 86, Public Transportation Security, Volume 1: *Communication of Threats: A Guide*
J-10B(5) Transit Use of Dogs	$ 15,000	Complete June 2002	Primer on how dogs are used in public transportation for security patrols, explosives detection, and chem/bio detection Published as TCRP Report 86, Public Transportation Security, Volume 2: *K9 Units in Public Transportation: A Guide for Decision Makers*
J-10C Guidelines for Conduct of Emergency Training Drills, Simulations, and Exercises	$100,000	In development	Develop a guidebook for use by transportation systems and emergency responders in the planning, design, development, implementation, and evaluation of drills, simulations, and exercises. NCHRP 20-59(18) is co-funding this project with a matching $100,000.
J-10D Developing and Updating Security Plans: A Pilot Course for Rural and Community-based Public Transportation Systems	$200,000	Contract Pending	Development of a 2-day program and materials based on FTA's *Public Transportation System Security and Emergency Preparedness Planning Guide.*
J-10E Comprehensive Security Resources CD	$ 45,000	In development	Augment or update the existing library of security materials developed under project J-10A(1).
J-10F Transportation Agency Continuity of Operations Plans	$100,000	Contract Pending	Develop guidance for efficiently resuming transportation agency operations following a terrorist attack or other natural or man-made disasters. NCHRP 20-59(21) is co-funding this project with a matching $100,000.
J-10G Making Transportation Tunnels Safe and Secure	$200,000	In development	Assess the operational and structural security and safety needs of the underground transportation infrastructure. NCHRP 20-67 is co-funding this project with a matching $200,000.
J-10H Security Measures for Ferry Systems	$150,000	In development	Provide Guidance on risk assessment approaches and on security measures.

Updated April 1, 2004

THE NATIONAL ACADEMIES
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The CHAIRMAN. Thank you very much.

Mr. O'Connor.

Mr. O'CONNOR. Senator, I will be briefer than my opening remarks. Internally——

The CHAIRMAN. Your opening remarks were just fine, Mr. O'Connor.

Mr. O'CONNOR. Thank you.

The CHAIRMAN. Despite your accent is incomprehensible.

[Laughter.]

Mr. O'CONNOR. So I have been told.

Internally, we have tried to protect against the most catastrophic of events, first against people and then against infrastructure. In answer to your question, the tunnels, that is where the two points meet. That is where the most people concentrate and that is where the most damage can be done to our infrastructure and we believe to the economy of the whole eastern region.

The CHAIRMAN. What about the bridges?

Mr. O'CONNOR. Bridges are a concern. They are probably in our top ten, but the tunnels come first.

The CHAIRMAN. And the argument—I am from the West, obviously, and I am not—I do not have any bias in this issue. I want us to establish——

Mr. O'CONNOR. Our engineers tell us that they can replace a bridge easier than they can build a tunnel and unflood a tunnel.

The CHAIRMAN. Could you make the argument, based on concentration of population and use, such as East Coast and West Coast—Senator Boxer pointed out that the West Coast, that California has a very high concentration of users of mass transit. How do you factor in all that?

Mr. O'CONNOR. Again, you can improve security almost anywhere, whether it be a one whistle stop platform or Penn Station where 600,000 people——

The CHAIRMAN. But we are trying to look at where we think it would be most likely. We want to take care of them all, as you say. But we have to have some prioritization.

Mr. O'CONNOR. Right, and we know that places like New York and Washington have been targets before and most likely will be targets again.

The CHAIRMAN. So you would argue from what we know that areas of greatest population and concentration of traffic would be normally the highest priority? It just seems there is a certain logic to that.

Mr. O'CONNOR. The intelligence also seems to back that up, and that is probably something that the Committee would want to speak to the Department of Homeland Security about.

The CHAIRMAN. Well, one thing I have gotten out of this hearing is we need threat assessment very badly and an overall picture from the Department of Homeland Security, and I hope that this hearing has motivated our friends over at DHS to provide that.

I thank you all for your testimony and your appearance here and your patience today. Thank you very much.

[Whereupon, at 12:45 p.m., the Committee was adjourned.]

A P P E N D I X

PREPARED STATEMENT OF HON. JOHN D. ROCKEFELLER IV,
U.S. SENATOR FROM WEST VIRGINIA

Mr. Chairman,

Right now we are at war with the terrorists. There is no question that they mean to do us harm. I just returned last week from Iraq, viewing first hand the situation on the ground. I also spend probably half of every day in briefings or meeting on Al Qaeda and other terrorist threat activities.

What we do know, is that events in the course of our Nation's history have dictated actions. Whether it is Pearl Harbor or 9/11. Madrid, for Europe, clearly has become a mobilizing force as the European Union has focused on revamping its security networks. Here, we also must understand that Madrid is an event we cannot, and must not, ignore.

Looking at our vital and critical infrastructure—rail, this morning, and a seaport security hearing tomorrow morning—we have vast and diverse systems, giving us the benefits of a highly mobile transportation system, while at the same time providing potential target for terrorists.

- Millions of Americans board Amtrak trains and public transit at hundreds of stations across the country every day.
- Millions of tons of dangerous chemicals and other hazardous materials pass through Charleston, West Virginia and countless other communities every day.

We also know that we have not devised a comprehensive security plan to minimize the risk to the people that ride the rails and for the communities that abut the rails. Right now, we have left it to local communities, transit agencies, railroads, and shippers to develop their own threat assessment and security plans. Each, I am reasonably certain, is acting diligently. For example, I know we will hear about efforts by the rail and chemical industry to establish emergency communications systems and other efforts to ensure that first responders have the best information available. However, the Federal Government is not moving quickly enough to develop a national risk assessment for rail infrastructure nor providing the resources necessary to protect these assets.

I remain particularly concerned about the vulnerability of the millions of tons of hazardous materials—notably chemicals that are shipped through my state and almost every community. I recently hosted a homeland security summit in West Virginia, and my state and local officials are very concerned that they will not be able to adequately respond to an attack on a train carrying dangerous chemicals or other substances. I commend the efforts of the chemical industry and the railroads to address this issue, but we cannot rely on their efforts alone. This is a national security issue.

The Transportation Security Administration has developed multiple layers for aviation security, which I believe is the appropriate approach as no one layer is perfect. The same must be done for rail and transit systems. Simply allowing local communities to conduct vulnerability studies, without funds to turn them into action plans, is not sufficient. Look at aviation—we are spending billions on it, and making progress. It took a Congressional mandate, backed by funding to get to this point. We need the same commitment with respect to rail. Secretary Ridge yesterday acknowledged that we can not apply aviation standards to rail, but that should not end the discussion. We also cannot simply shift resources from one mode to the next, but instead must have sufficient budget requests to get the job done. We cannot do homeland security on the cheap. We need to be investing billions more to prevent and deter threats to our transportation infrastructure. We need to focus on developing the new technologies that will ultimately make us safer and be more cost-effective.

I hope that our witnesses today will speak to what the Administration and the industry have done to identify the vulnerabilities of our rail system, what is being

done to protect then, and how the Federal Government is going to help local communities meet the challenge of responding to a terrorist attack against a freight train full of deadly chemicals or other hazardous materials.

PREPARED STATEMENT OF AJAY MEHRA, PRESIDENT,
OSI SYSTEMS, INC. SECURITY GROUP

Mr. Chairman and Senator Hollings, I thank you for the opportunity to provide testimony to the committee about the pressing issue of improving the security of our Nation's rail system. In light of the recent tragic attacks in Spain, I applaud the Committee for

bringing the issue of rail security once again to the fore. As President of the OSI Systems Security Group, I am eager to lend my organization's collective experience to the formulation of a policy on rail security. We strongly support this legislation and the efforts of this committee to secure an important modality promoting commerce and transportation, our railroads.

My hope is to inform the Committee of the most effective way to address the potential threats posed by terrorism to the Nation's rail. I will provide a brief description of OSI System's expertise in providing transportation and border security, and then offer our best solution to rail security.

OSI Systems, Inc. provides a variety of non-intrusive inspection technologies for securing nearly every transportation modality, including railroads

OSI Systems is the leading developer and manufacturer of non-intrusive inspection (NII) technologies under the Ancore, Aracor, Metor and Rapiscan brands. Our technology portfolio includes multi-energy X-ray imaging, diffraction X-ray, backscatter X-ray imaging, gamma ray imaging, computed tomography, nuclear quadrupole resonance, metal detection, and neutron activation analysis. We have supplied over 20,000 security screening systems to customers worldwide and are dedicated to providing quality equipment and excellent customer service in a cost-effective manner. The company has over 1,000 employees in the United States and many additional employees around the world.

As a security technology provider, OSI Systems has extensive experience in rail security. We have helped the Chinese government develop their rail inspection system and have installed cargo and passenger screening systems around the world for nearly every transportation modality. We have examined the issues surrounding rail security, and we believe that relatively simple modifications to current technologies can be made to effectively safeguard our rail system.

Rail security presents distinct challenges and threats from other transportation modes

In contrast to the security issues surrounding aviation and sea transport, rail security presents variety of new threats and security needs. We at OSI Systems believe the necessary first step in protecting rail passengers and freight is to define the types of potential threats that could be faced in rail attack scenarios and how they differ from our current understanding of the threats in aviation and sea transport. While we must strive to prevent all attacks, the amount and types of explosives and weapons of mass destruction (WMD) terrorists use differ by target. Smaller levels of explosives are catastrophic in aviation, but rail cars are more accessible. After we define the vulnerabilities and threats, we can establish the most effective and efficient means to prevent and detect these threats.

As demonstrated most terribly in Spain, the principle threats to railway safety are explosives and WMD. With that in mind, railway transportation has its own distinct threat levels of explosives. We encourage Congress to direct TSA to determine these threat levels as soon as possible. This will allow industry partners, like OSI Systems, to design technologies aimed at detecting these weapons.

I want to stress, that technology exists today that can effectively inspect train cargo and passengers. However, we should first clearly define our vulnerabilities and the potential threats, so that we install systems designed for rail security.

Passenger screening is a key component of rail security

Millions of passengers ride trains every year. Yet none of these passengers passes even through rudimentary screening systems such as those you all walked through to get to this committee room. The differences from aviation are even more striking. Considering that every piece of carry-on baggage, checked baggage and every passenger are inspected before boarding an airplane while none of these efforts are

made in rail safety, it seems that rail security is wide open to potential attack. And, as terribly demonstrated in Spain earlier this month, this is clearly a gap that terrorists will exploit.

With passengers and carry-on luggage constituting the principle delivery mechanisms, we must array our detection technology against these channels, focusing detection on explosives and weapons. While these threats faced in a rail environment differ somewhat from the threats to aviation, the technologies and configuration used are essentially the same.

Similar to airport checkpoints, portal metal detectors would be placed along side of carry on baggage X-ray systems for rail checkpoints. These systems would be combined with currently employed trace element Explosive Detection Systems or any type of explosive material specific technology. The number of checkpoints needed would be configured to give the best throughput possible based on the specific rider-ship typical for that station. It is important to note that there is far less checked baggage in rail travel than aviation so the baggage inspection requirements should be dramatically less intrusive and costly.

We recommend that the Committee consider using currently employed TSA qualified technologies. Using TSA qualified technologies makes policy sense for the ease of use, familiarity and ease of procurement. These technologies are available off the shelf. OSI Systems, along with other industry leaders, produce all of these systems. TSA screeners are extremely familiar with TRX systems, portal metal detectors and trace element detectors. No additional training is required for operators of these systems. Maintenance of these technologies is also familiar to the TSA.

TSA also has sufficient procurement vehicles in place to acquire the needed passenger screening technology. TSA should use the currently active contracts to accommodate for this additional need for rail security. These technologies have long since been vetted through the procurement process, so only the time of production and delivery until solutions could be in place.

We view freight as separate and much less of a concern than carry-on baggage for delivery of explosives, as freight is carried in separate rail cars, and not in the belly of a passenger car like a plane. The TSA should develop appropriate screening protocols to insure the safety of freight, however, our main concern with this legislation is securing the rails for passengers.

Maintaining the stream of commerce will potentially be the largest hurdle to implementing a rail security strategy. However, because the threats posed to railroads are considerably different than those in aviation, the technology should be able to inspect passengers and cargo more quickly.

Rail security screening systems are available and can be quickly deployed to protect train passengers and the rail system

Securing large parts of the rail system is well within capability of the U.S. government and current screening technologies. With only minor modifications, current TSA employed technologies should be able to detect these threats effectively. Portal metal detectors, TRX carry-on X-ray systems and trace explosive detection technologies are well known by the TSA. They require no training, no new configurations, and no new procurement vehicles.

OSI System is committed to placing the best tools in the hands of our government to secure our homeland. I am honored to add our experience to address the issue of rail security. I want to thank the Committee again for this opportunity to testify.

RESPONSE TO WRITTEN QUESTIONS SUBMITTED BY HON. JOHN MCCAIN TO HON. ASA HUTCHINSON

Question 1. What is TSA's role with respect to rail security and what should it be in the future?

Does TSA have a unique role or should rail security be overseen by other agencies within DHS and the Department of Transportation?

Why has most of the progress that has been made in improving rail security taken place outside of TSA, the agency with primary responsibility for rail safety?

If the issue is that most of the funds and attention have been focused on airline and airport security, why is the Administration not asking for more funds now to address rail security?

Combined Answer. The responsibility of securing our Nation's rail and mass transit systems is shared among a number of Federal, State, and local partners. TSA does have a specific role, in that no other organization is uniquely positioned to ef-

fectively coordinate all of the activities and manage the development, implementation, and oversight of any necessary security protocols and standards.

The Department has consistently held that security responsibility must involve the coordination of appropriate Federal, State, tribal, local and private industry partners, many of whom were already in the business of providing security for their particular piece of the transportation sector. DHS, Department of Transportation (DOT), and other Federal agencies are working together to enhance rail and transit security in partnership with the public and private entities that own and operate the Nation's rail and transit systems.

Presidential Directive 7 (HSPD–7), directs the establishment of "a national policy for Federal departments and agencies to identify and prioritize United States critical infrastructure and key resources and to protect them from terrorist attacks." In accordance with DHS's HSPD–7 implementation plan and in partnership with other Federal stakeholders, TSA is coordinating the development of the Transportation Sector Specific Plan (SSP). A first draft of the SSP is due to DHS by early summer, 2004 (at the same time when SSPs from the other 12 critical infrastructure sectors are also due). In developing the transportation SSP, TSA is working under BTS guidance and with partners in the U.S. Coast Guard and DOT. The SSP will discuss how Federal and private-sector stakeholders will communicate and work together; how important assets in the transportation sector will be identified, assessed,; how protective programs will be developed and prioritized; how progress in reducing risk will be measured; and how R&D will be prioritized in the sector. In the Transportation Sector, the SSP will further the efforts currently underway and help ensure that they are systematic, exhaustive, and consistent with the efforts in the other 12 sectors. DHS will build on the foundation of the SSP to provide overall operational planning guidance on rail security. The SSP will ensure that modal security plans are integrated into an effective concept of operations for security management of the rail sector within our Nation's transportation system.

As an example of TSA's collaboration with other Federal agencies and rail industry stakeholders, TSA, Amtrak, Maryland Transit Administration, and the Federal Railroad Administration have combined efforts to institute a passenger and carry-on baggage screening prototype for explosives in a rail environment known as the Transit and Rail Inspection Program (TRIP). Under the first phase of this program, TSA screened Amtrak and MARC commuter train passengers for explosives at the New Carrollton, Maryland train station during the month of May as part of a test program to make rail travel more secure. The pilot project is testing existing and prototype technologies to determine their usefulness in a rail environment.

The DHS grant program for improving rail and transit security in urban areas has awarded over $115 million since May 2003. Additionally, the Administration has requested $24 million for TSA to advance security efforts in the maritime and surface transportation arenas, and has requested that $37 million of the Federal Transit Administration's Urban Security Bus grants be available for security related projects.

On March 22, 2004, Secretary Ridge announced additional measures to strengthen security for our rail and transit systems. DHS will build on many of the security measures recommended during the past two years for implementation to mass transit and passenger rail authorities by DHS, the Federal Transit Administration, and the Federal Railroad Administration.

Since the time of this hearing, DHS has issued Security Directives (SD) requiring protective measures to be implemented by passenger rail operators. The measures instruct commuter, transit, and passenger rail systems to comply with requirements that range from removing or replacing station trash cans to utilizing canine explosives detection teams. The directives will be administered by TSA and took effect on May 23, 2004. These measures, in addition to others already in place, will advance our mission to ensure rail passengers are protected.

Question 2. In 2003, the Maritime and Land Division of TSA indicated it would develop security standards for all modes of transportation by the end of the year. However, no standards have been issued and yesterday Secretary Ridge announced that DHS would begin working with industry to develop "best practices". Why has no progress been made so far and what is your timetable for developing best practices?

Answer. In general, TSA is responsible for ensuring that all modes of transportation are secured by partnering with the appropriate Federal, State, tribal, local and private industry stakeholders, many of whom were already in the business of providing security before the creation of TSA. TSA's role in securing the transportation system begins at the system or sector-wide level, across the individual modes, thus ensuring consistency and consideration of inter-modal issues (such as assets, incidents, or supply chains that straddle multiple modes, and inter-modal facilities).

Furthermore, as noted above, DHS recently issued SDs requiring protective measures to be implemented by passenger rail operators. The SDs took effect on May 23, 2004 and apply to all passenger rail owners/operators.

In the aftermath of the recent events in Spain, Russia and elsewhere, passenger rail operators have implemented a number of robust security measures. TSA has partnered with the private and non-Federal sector to develop and disseminate best practices with regard to securing non-aviation modes:

- TSA developed a series of security awareness tools for mass transit employees such as tip cards, pamphlets, and posters. These products are intended for all mass transit employees as a reminder or checklist on what to look for during mass transit operations to prevent a terrorist attack. Similar products are under development for mass transit passengers.
- TSA held a security awareness workshop in October of 2003, which drew representatives from the motorcoach, school bus, mass transit and enforcement organizations from around the country. Attendees were briefed on the tactics and tools of suicide bombers, provided an overview of the latest detection technology and provided an overview of possible scenarios to encourage discussion of best practices.

In addition, DHS has assigned TSA primary Sector Specific Responsibility for the development of the Transportation Sector Specific Plan as DHS implements Homeland Security Presidential Directive 7 (HSPD–7), which directs the establishment of "a national policy for Federal departments and agencies to identify and prioritize United States critical infrastructure and key resources and to protect them from terrorist attacks." In accordance with DHS's HSPD–7 implementation plan, TSA is coordinating the development the Transportation Sector Specific Plan (SSP) under BTS guidance and with partners in the U.S. Coast Guard and the DOT. A first draft of the SSP is due to DHS by early summer 2004. An important role of the SSP will be to facilitate and improve both the development and the sharing of "best practices" in transportation security among government and private sector stakeholders to ensure that they are systematic and complete.

Question 3. Of the $1.45 billion in the President's Fiscal Year 2005 budget for the Urban Area Security Initiative, how much will be available for mass transit grants? Do you believe Amtrak should be eligible to receive such grants?

Answer. The President's Budget request includes $1.45 billion for continuation of the Urban Areas Security Initiative, including $1.2 billion for the UASI grant program, $200 million for Critical Infrastructure Protection (CIP), and $46 million for Port Security. Depending on the outcome of the FY 2005 congressional appropriations, the Department will make final funding decisions, which may include funding for mass transit systems out of the UASI grant program. At this point, final decisions have not been determined, but mass transit security is a priority of the Department and the Administration.

Question 4. Pursuant to the statutory direction of Congress in appropriations acts and the Homeland Security Act of 2002, ODP grant program funds are meant to assist State and local units of governments and emergency responders prevent, prepare for, and respond to acts of terrorism. Furthermore, as a Federal entity, Amtrak is not eligible to receive grant funds from the Office for Domestic Preparedness. ODP firmly believes that its grant funds should be focused on assisting State and local emergency responders.

Amtrak's President. David Gunn, indicated stated last year that it should be TSA's responsibility to fund additional security personnel for Amtrak. Do you agree?

Answer. Generally speaking, however, TSA does not envision a role providing operational security staff to Amtrak or other rail systems. Security is a shared responsibility between appropriate Federal, State, tribal, local, and private industry entities. Given the vast infrastructure comprising passenger rail, any Federally-supported security enhancements must be the product of careful risk assessments and cost benefit analysis.

TSA will continue to coordinate these efforts under the guidance of DHS and BTS, identifying gaps and working with appropriate partners to ensure that existing security gaps are filled. Last year, TSA provided comments to the President and Chief Executive Officer, David Gunn, on Amtrak's official security plan, submitted April 10, 2003. This close coordination has been established and ongoing among Amtrak, Federal Railroad Administration, and TSA and remains essential as we move forward together to enhance rail security.

Question 5. Could you please give the Committee an update on the installation of railcar screening equipment at the northern and southern borders?

Answer. U.S. Customs and Border Protection (CBP) has a long history of working in the rail environment. The ever-increasing volume of rail traffic has made physical inspections of rail shipments difficult and time-consuming. To improve the examination efficiency at Southern and Northern border rail crossings, CBP developed a rail screening strategy incorporating Rail Vehicle and Cargo Inspection System (rail gamma-ray scanner) technology through an adaptation of the large-scale imaging technology deployed to our land border and seaport environments.

Rail gamma-ray scanner technology allows CBP to safely and quickly screen an entire train for contraband, including potential terrorists and the implements of terror. Rail gamma-ray scanners allow CBP to segregate suspicious shipments and minimize the possibility of dangerous goods entering the United States while facilitating legitimate trade and cargo.

CBP has done much to mitigate the threat posed by terrorists seeking to smuggle radiological material into the United States through risk management and CBP's layered enforcement strategy. In addition to Rail gamma-ray scanner equipment, CBP Officers currently utilize personal radiation detectors and radiation isotope identifiers to screen for radiation at rail examination sites. More robust radiation detection technology such as radiation portal monitors will be deployed to rail crossings in a phased approach.

Southwest Border

There are eight rail crossings on the U.S./Mexico border. Rail gamma-ray scanner systems have already been deployed to seven of these crossings. The gamma-ray system will be deployed to the eighth rail crossing during calendar year 2004. Once this system is deployed, CBP will have the capability to screen 100 percent of the rail traffic arriving in the United States from Mexico.

Northern Border

There are 23 rail crossings on the U.S./Canada border. Eight gamma-ray scanner systems have been deployed to seven U.S. locations. Four systems will be deployed at two locations in Canada. CBP estimates the first two systems will be operational by the fall of 2004 and total deployment completed in Canada by the fall of 2005. The 12 rail gamma-ray scanner units deployed to these nine northern border rail crossings will provide CBP with the capability to screen up to 90 percent of all rail traffic arriving in the United States from Canada.

Along with rail gamma-ray scanner technology, railcar examination facilities have been built. These facilities provide CBP officers with the capability to unload railcars and examine their contents when necessary. Rail gamma-ray scanner technology, along with rail examination facilities, further strengthens existing border security and enhances CBP's anti-terrorism efforts.

CBP intends to deploy rail gamma-ray scanner units to the remaining 14 rail crossings on the northern border. Once fully implemented, our northern border rail initiative will provide CBP with the capability to screen 100 percent of the rail traffic arriving in the United States from Canada.

Response to Written Questions Submitted by Hon. Ernest F. Hollings to Hon. Asa Hutchinson

Question 1. In response to the question "In Washington, Amtrak and commuter trains operate through tunnels under Capitol Hill. What has DHS done to ensure that these tunnels are properly secured," posed by Senator Hollings, from the April 2003 hearing, Secretary Ridge responded with "The Virginia Avenue Tunnel is owned by CSX. CSX has posted security guards around the clock at each end of the tunnel since September 11, 2001. CSX is currently installing intrusion technology at both ends of the tunnel to replace the security guards."

What is the status of these security efforts? Has the intrusion technology been installed? Is CSX undertaking these efforts alone and at their own expense?

Answer. There is an intrusion detection system monitoring both ends of the Virginia Avenue Tunnel, as well as a meteorlogical station that monitors the atmospherics in case of an emergency involving the release of chemical being transported. The CSX Police Communications Center monitors the intrusion detection system 24 hours a day/seven days a week. Most alarms are referred to the U.S. Capitol Police for response due to their close proximity and interest in hazardous material shipments transported close to the U.S. Capitol and associated surrounding buildings.

Question 2. Should DHS be playing a more active role in either providing personnel or helping to finance the security of our key rail bridges and tunnels? If so, do you plan to request specific funds for this activity in the near future?

Answer. TSA already plays a very active role in assisting passenger and freight railroad industries in addressing vulnerabilities and facilitating mitigation strategies. TSA has deployed a model to determine criticality of transportation facilities and assets, and with partners within the Department of Homeland Security (DHS) and the Department of Transportation (DOT), is conducting vulnerability assessments of transportation assets, such as rail and transit, to determine their susceptibility to attack or compromise. The Department coordinates information and threat sharing for rail and transit through the Surface Transportation Information Sharing and Analysis Center (ST–ISAC), in partnership with the Association of American Railroads (AAR) and the American Public Transportation Association.

TSA provides comprehensive security reviews for railroad owners and operators. We meet with stakeholders to review and assess security plans and to ensure that baseline security measures address different threat levels. Upon completion of the review, we provide guidance for improving overall system security. Many railroad carriers have taken additional security measures to protect their rail transportation system against terrorism. TSA is benchmarking existing industry best practices to recommend potential mitigation measures to industry stakeholders. In addition we are considering the feasibility of intrusion detection systems and unmanned aerial vehicles to monitor and protect rail infrastructure, bridges, tunnels, and other fixed assets. In the Washington D.C. metropolitan area, TSA is leading a multi-agency task force to conduct a comprehensive security review of rail infrastructure used to convey hazardous materials and to create a plan to address any vulnerabilities uncovered. An interagency working group will conduct similar reviews in two to three other high-threat urban areas.

All of these programs are being implemented using existing funds, and we do not anticipate that the Administration will request additional funds in FY 2005.

Question 3. The original question above about the security of the trains which run under the Capitol, was directed more specifically towards the security of the 1st street tunnel, which runs under the Capitol and the Supreme Court, not the Virginia Avenue Tunnel, which runs parallel to the House buildings. In light of this clarification what has DHS done to secure the 1st street tunnel? Currently how secure is it? What more must be done to fully secure the tunnels and how soon must it be accomplished?

Answer. The 1st Street Tunnel is owned and maintained by Amtrak and used to carry passenger trains only. U.S. Capitol Police and Amtrak personnel closely monitor the area surrounding the tunnel. Future plans include installing cameras at the Amtrak/CSX interchange point which is approximately 500 feet away from the tunnel, to enhance existing surveillance capabilities provided by the Capital Police and Amtrak and provide a deterrence measure.

TSA is working on developing and deploying an integrated monitoring, detection, and alerting system with the ability to distinguish, track, and display anomalous human behavior in multiple-stream video feeds for the identification of possible terrorist attacks in a commuter rail setting. TSA and the Technical Support Working Group (TSWG) have a partnership with Amtrak to prototype this project at the 30th Street Station in Philadelphia, PA. This technology may be used in the future to secure infrastructure such as the 1st Street Tunnel as well as other key assets.

Question 4. Since 9/11, DHS has provided more than $30 billion in Federal funding for aviation concerns related to 9/11, yet has expected the rail industry to largely fund their own efforts. Can you explain this discrepancy in Federal responsibility and funding? Does the Administration simply believe that aviation concerns are a higher national priority, despite the resent attacks in Madrid and evidence sited in testimony given by the Rand Corporation citing the pervasiveness of attacks against railroads?

Answer. Ensuring that our Nation's transportation systems are secure must be accomplished through effective partnering among appropriate Federal, state, local and private industry entities. Much of TSA's activities support our mission across the various transportation modes, making them difficult to categorize as exclusively benefiting a single mode.

Although the creation of a Federal screener workforce has meant that DHS currently provides a greater proportion of the security costs for aviation compared to other modes, transportation security is a partnership among Federal, state and local governments and the private sectors.

In aviation, the Federal jurisdiction and operational responsibility is clearly significant. For these reasons, DHS has known that the aviation model would not work as well for securing all modes of transportation. Thus, we have worked with our State, tribal, local, regional and private partners to help secure our transportation system. In coordination with DOT, state, local and private sector partners, DHS's

efforts in non-aviation security over the past two years have focused on greater information sharing between industry and all levels of government, assessing vulnerabilities in non-aviation sectors to develop new security measures and plans, leveraging existing security initiatives, increasing training and public awareness campaigns, and providing greater assistance and funding for non-aviation security activities.

DHS, DOT, and other Federal agencies are working together to enhance rail and transit security in partnership with the public and private entities that own and operate the Nation's rail and transit systems. Part of TSA's responsibility is the coordination of these entities, many of whom have always been and continue to be in the business of providing security for their particular piece of the transportation sector. Working with our partners, TSA plays an active role throughout the entire transportation system providing research and development, advisory services, and intermodal coordination. A number of steps have already been taken to address vulnerabilities in the rail and transit systems and improve our security posture against attacks.

Question 5. Does DHS have a special responsibility for securing Amtrak since it is a national carrier that is significantly funded by the Federal Government and its key asset—the Northeast Corridor—is owned by the U.S. DOT? Isn't this akin to the U.S. government's ownership of the air space and our responsibility to secure aviation?

Answer. The responsibility of securing our Nation's rail and mass transit systems is shared between DHS, DOT, and other Federal agencies in partnership with the public and private entities that own and operate those systems. To our knowledge, the Northeast Corridor was purchased by Amtrak from the bankrupt Penn Central at the time of its restructuring. Operators in the corridor include New Jersey Transit (NJT), Southeastern Pennsylvania Transportation Authority (SEPTA), Massachusetts Bay Transportation Authority (MBTA), Metro North Railroad, CSX and NS. Amtrak utilizes its own police and security forces and takes the lead in providing security for this section of critical transportation infrastructure.

Question 6. Is Amtrak currently eligible for any grants or other funding from DHS for security improvements? If so, through what programs?

Answer. As a Federal entity, Amtrak is not eligible to receive grant funds from the Office for Domestic Preparedness.

Question 7. The Department has stated that, in conjunction with the FRA, it has conducted "comprehensive vulnerability assessments" of rail networks in high density urban areas. How many rail vulnerability assessments have been concluded at present? Who has primarily provided the funding for these assessments? How many more are planned?

Answer. The FTA funded "security risk assessments" for at least 50 of the largest transit agencies in the nation, which included the 10 largest commuter railroads under FRA's jurisdiction. FRA participated in all of the security risk assessments on those 10 commuter railroads and contributed to the funding for three of those risk assessments. TSA has reviewed FTA's 34 "vulnerability assessments" on transit systems in high density urban areas and three vulnerability assessments on commuter rail lines and provided a gap analysis to FTA.

Additionally, TSA is finalizing for delivery a hazardous material rail security assessment that includes vulnerability assessment/hazard analysis in the Washington, D.C. area. This will be followed by two additional HAZMAT assessments as well as four to five passenger assessments. These assessments will be coordinated with FRA, FTA, RSPA and IAIP.

Question 8. Once vulnerability assessments have been concluded, does the Department have the ability to compel rail carriers or transit agencies to address the vulnerabilities identified?

Answer. The Department has the authority under 49 U.S.C. 114(f) to require transportation owners and operators, including rail carriers and transit agencies, to address identified vulnerabilities. As an example, on May 20, 2004 DHS issued Security Directives (SD) to ensure the best of these practices are implemented throughout the industry. The SDs, which are being administered by TSA, establish mandatory protective measures for commuter and transit passenger rail, inter-city train, and regional services. To enforce the directives, in coordination with the rail operator, TSA will designate Security Partnership Teams comprised of representatives from DHS/TSA and DOT. Team visits will be prioritized based on criticality, threat, and the status of the last vulnerability assessment.

Question 9. It is still unclear from the testimony presented at the March 24, 2004 Rail Security Hearing, whom exactly is in charge of rail security and ultimately responsible for coordinating the multitude of federal, state, local, and industry rail se-

curity efforts. Is this primarily DHS's job? What role does FRA have? Is TSA spearheading the effort for the Department?

Answer. TSA is responsible for coordinating security efforts across the intermodal passenger and supply chain. This responsibility must involve the coordination of appropriate federal, state, local and private industry partners, many of whom have always been, and continue to be, in the business of providing security for their particular piece of the transportation puzzle. TSA's main charge, both under the Aviation and Transportation Security Act (ATSA) and now as part of the DHS family, is to coordinate these efforts under the guidance of the Secretary and the Under Secretary for Border and Transportation Security (BTS), identifying gaps and working with appropriate partners to ensure that existing security gaps are filled. Under DHS leadership, TSA is responsible for (1) establishing consistent national transportation security standards across all modes, (2) monitoring compliance with these standards by transportation stakeholders, (3) evaluating risk to the system across a changing array of threats, (4) sharing threat and risk information with transportation stakeholders (public and private), and (5) in the event of a transportation security incident insuring rapid restoration of service and public confidence. TSA is currently engaged in this process through rulemaking, risk modeling and contingency planning. The challenge in implementing this strategy centers on the proper balance between public and private responsibility/investment in achieving an acceptable security level. TSA/DHS will work with transportation stakeholders (public and private) to develop consistent security standards across all transportation modes.

DHS, DOT, and other Federal agencies are working together to enhance rail and transit security in partnership with the public and private entities that own and operate the Nation's rail and transit systems. Homeland Security Presidential Directive 7 (HSPD–7) directs the establishment of "a national policy for Federal departments and agencies to identify and prioritize United States critical infrastructure and key resources and to protect them from terrorist attacks." Under HSPD-7, DHS has the lead role in coordinating protection activities for "transportation systems, including mass transit, aviation, maritime, ground/surface, and rail and pipeline systems," while DOT is responsible for promoting the safety, efficiency, effectiveness, and economic well-being of the Nation's transportation systems.

DHS has assigned TSA primary Sector Specific Responsibility (SSR) for the Transportation Sector. TSA is developing and coordinating the Transportation Sector Specific Plan (SSP) in conjunction with our partners at DOT and USCG and under the guidance of the Undersecretary for Border and Transportation Security. DOT and its component modal administrations have subject matter expertise, substantial relationships, and frequent interactions throughout the entire Transportation Sector, as well as some regulatory authority. For these reasons, as well as requirements in HSPD–7, TSA collaborates closely with DOT's modal administrations, including FRA, on transportation sector security and will continue to do so.

The SSP will discuss how Federal and private-sector stakeholders will communicate and work together; how important assets in the transportation sector will be identified, assessed, and prioritized; how protective programs will be developed; how progress in reducing risk will be measured; and how R&D will be prioritized in the sector. In the Transportation Sector, the SSP will further these efforts currently underway and help ensure that they are systematic, complete, and consistent with the efforts in the other 12 sectors. The first draft of the Transportation SSP is due shortly.

Question 10. According to the Department of Homeland Security, $115 million in Federal grants have been authorized, but the American Public Transportation Association (APTA) reports that only $35 million have actually reached the transit authorities so far. Can you explain what is holding up the distribution of these funds to transit authorities?

Answer. The Department of Homeland Security, through the Office for Domestic Preparedness, provided $65 million in Fiscal Year (FY) 2003 to 19 designated mass transit systems. Although administered by the ODP, the Urban Areas Security Initiative (UASI) Transit System Security Grant Program has been coordinated with the Transportation Security Administration and the Department of Transportation's Federal Transit Administration. This support was continued through the FY 2004 UASI program, which provided $50 million for 25 transit systems. As in FY 2003, ODP worked closely with TSA to determine those transit systems to receive support through this program.

To date, none of the FY 2003 UASI Transit Security Grant funds have been drawn down by the recipient agencies. Attached is a chart detailing specific information about the FY 2003 awards, including grantee, award date, award amount, and current draw down information. It should be noted, though, that recipients of the FY 2003 UASI Transit Security grants have 24 months to expend their funds. Given

that most of these awards were made in late 2003, the grantees have until late 2005 to draw down their awarded funds. As we have seen with the Homeland Security Grant Program awards and the Urban Areas Security Initiative awards, the reasons for lack of draw down of these funds can vary based on the recipient agency—including length of time required for grantees to contract or sub-grant these funds, time required to procure specialized equipment, and variances in state and local laws and regulations governing the acceptance and expenditure of Federal funds.

As you know, the Secretary has convened a Homeland Security Funding Task Force to examine the varying reasons for delays in states and localities expending homeland security funds. The Task Force, composed of state, county, city, and tribal representatives, is examining the funding process to ensure that Department of Homeland Security funds move quickly to local first responders. The Task Force will identify state and local funding solutions that work effectively and can be extended to situations where there are impediments to the efficient and effective distribution of state and local homeland security funds.

RESPONSE TO WRITTEN QUESTIONS SUBMITTED BY HON. FRANK R. LAUTENBERG TO HON. ASA HUTCHINSON

Question 1. Why has the Administration not requested any funding specifically for Amtrak rail security?

Answer. DHS, in coordination with its Federal, state, local and tribal government partners, as well as its private sector partners, is committed to improving the security of our Nation's passenger rail system. While, the President's Fiscal Year 2005 budget request for TSA does not include specific funding for Amtrak security personnel, DHS will continue to carefully monitor the rail security situation.

The President's 2005 Budget proposes $1.4 billion for Amtrak beginning in 2006, assuming fundamental reforms are instituted. If Amtrak were to develop a security plan that received DOT and DHS approval, this amount could help fund life-safety and security projects.

Question 2. Does BTS follow up on the security recommendations issued by the Infrastructure Protection Directorate to infrastructure owners/operators? Are IAIP's security recommendations are designed to improve security to a certain objective level, or just provide options for where any new spending on security should be directed?

Answer. The Office of Information Analysis (IA) within the Information Analysis and Infrastructure Protection (IAIP) Directorate provides threat information in the form of Information Bulletins and Threat Advisories to owners and operators of various sector facilities, including the transportation sector. IA/IP's products are designed to provide threat awareness based upon current intelligence reporting and suggested protective measures. Specific recommendations or guidelines are often subsequently issued by BTS component agencies, including the Transportation Security Administration, Immigration and Customs Enforcement, and U.S. Customs and Border Protection.

Question 3. New radiological detection equipment has been deployed to screen cargo on trucks leaving the ports. Similarly, does BTS intend to screen rail cars leaving ports?

Answer. BTS utilizes radiological detection equipment, assigned to inbound cargo processing, to screen outbound cargo for vessel, air, truck and rail shipments leaving the country when a review of the export documentation indicates that a shipment may be high risk. CBP is looking for weapons of mass destruction, conventional weapons and their component parts that potentially could fall into the hands of terrorists. CBP's goal is to prevent terrorists or criminal organizations from obtaining the components of WMD or conventional weapons.

RESPONSE TO WRITTEN QUESTIONS SUBMITTED BY HON. JOHN D. ROCKEFELLER IV TO HON. ASA HUTCHINSON

Question 1. Local communities, companies and Amtrak have all had to go out and conduct their own vulnerability assessments. Many of these have probably been done by public transit agencies. How many assessments has TSA/DHS carried out?

Answer. TSA, in coordination with its Federal, State, local and private sector partners, is finalizing a hazardous material rail security assessment that includes vulnerability assessment/hazard analysis in the Washington, D.C. area. This will be followed by two additional HAZMAT assessments as well as four to five passenger assessments, which will be coordinated with FRA, FTA, RSPA, and IAIP. Addition-

ally, to date TSA has generated 543 criticality assessments to prioritize and identify our most critical assets.

TSA has also developed the TSA Self Assessment Risk Model (TSARM). This is designed to assist asset owners/operators in developing a security plan. The tool captures an asset's baseline security posture and identified additional measures that could be undertaken to reduce vulnerabilities. This tool is available at no-cost to users. Currently, a maritime module is operational with development efforts underway for General Aviation and Mass Transit. It is TSA's intent to have modules for each transportation mode.

Question 2. Other than the public transit agencies, how many grants has TSA given out for those studies?

Answer. The Federal Transit Administration (FTA) funded "security risk assessments" for at least 50 of the largest transit agencies in the nation, which included the 10 largest commuter railroads under Federal Railroad Administration's (FRA) jurisdiction. FRA participated in all of the security risk assessments on those 10 commuter railroads and contributed to the funding for three of those risk assessments. TSA has reviewed FTA's 34 "vulnerability assessments" on transit systems in high density urban areas and three vulnerability assessments on commuter rail lines and provided a gap analysis to FTA.

Additionally, TSA is finalizing for delivery a hazardous material rail security assessment that includes vulnerability assessment/hazard analysis in the Washington, DC area. This will be followed by two additional HAZMAT assessments as well as four to five passenger assessments. These assessments will be coordinated with FRA, FTA, RSPA, and IAIP.

In addition to rail assessments, TSA has provided grant funding to over 50 intercity bus agencies to conduct security assessments. Also, TSA has awarded 32 grants to specifically provide security assessments for maritime facilities. Security assessments currently are not required to be completed by public transit companies, although some have done them voluntarily.

Question 3. Once a study is completed, what does TSA do with the information—how do you harden these systems?

Answer. This response assumes that the word "study" in the question refers to vulnerability assessments. As a matter of policy, in allocating the UASI funds the Secretary dedicated to transit security, DHS required that transit applicants complete assessments and have security plans in place. The funds were targeted to assist in implementation of security plans.

Question 4. How do you share intelligence threat information with the various entities?

Answer. The DHS goal of domain awareness across all modes of transportation is served by enhanced information sharing with the increased access to both tactically actionable products and background information on groups and individuals. Information sharing is one of the critical mission areas that the Department of Homeland Security (DHS) has set as a priority for better preparing the homeland.

The DHS Office of Information Analysis (IA), in conjunction with other DHS entities, prepares warning products and distributes them to State, local, Tribal, major city, and private sector officials. These products, which include both Homeland Security Information Bulletins and Threat Advisories, allow DHS officials to communicate threats and suggested protective measures to regions and/or sectors of concern, within each threat level. Additionally, unclassified information is shared through a daily Homeland Security Operations Morning Brief and the weekly joint DHS–FBI Intelligence Bulletin. The Office of State and Local Government Coordination also coordinates bi-weekly conference calls with all of the Homeland Security Advisors in all the states and territories to help relay important departmental information as well as respond to queries from advisors.

The Department has also paid for and established secure communication channels to all of our state and territorial governors and their state emergency operations centers. This investment in communication equipment included secure VTC equipment along with Stu/Ste telephones. DHS has also worked to ensure every governor has been cleared to receive classified information and are working with the Governors and their Homeland Security Advisors to provide security clearances for five additional people who support the Governors' Homeland Security mission. This provides DHS an avenue for disseminating classified information directly to the location that needs the information.

Lastly, one of the primary ways in which DHS is improving its communication with its constituents is through the Homeland Security Information Network (HSIN) and specifically through the Joint Regional Information Exchange System (JRIES). Using this network, Federal, State, and urban area homeland security ad-

visors will be able to communicate with each other and with DHS, as will federal, state, and urban Emergency Operations Centers, and the National Guard and the state adjutant generals. Once connected, user groups will have access both to communication streams with each other and DHS, as well as to DHS warning products distributed by IA.

RESPONSE TO WRITTEN QUESTIONS SUBMITTED BY HON. JOHN MCCAIN TO HON. ALLAN RUTTER

Question 1. The transportation of hazardous materials by rail presents unique risks to the communities through which these shipments pass.

(a) What can be done to minimize these risks?

Answer. My prepared statement provides a broad overview of some of the Department's regulatory, research, and other programs intended to minimize the risks of transporting hazardous materials by rail, including the Department's work, under the coordination of the Homeland Security Council, with the Department of Homeland Security (DHS) to develop a plan to enhance rail security of hazardous materials that are toxic by inhalation (TIH materials). Let me focus now on this particular interagency initiative. The plan is the culmination of an over a year-long cooperative effort with DHS, with vital support in the aggregation of data from the U.S. rail industry.

Specifically, the Department of Transportation (DOT) and DHS are doing the following:

- Assessing the vulnerabilities of high-population areas where TIH materials are moved by rail in significant quantity, working with industry to put in place measures for mitigating identified vulnerabilities, compiling a nationwide vulnerability assessment, and completing pilot security plan implementation projects in cities of concern by the end of 2004 (beginning with the Washington, D.C., corridor).
- Conducting vulnerability assessments of those High Threat Urban Areas where the largest quantities of TIH chemicals are transported by rail and developing vulnerability remediation and protection plans.
- Developing by September 2004 predetermined protective measures, based on the threat level, specific intelligence, and vulnerability assessments, that selectively restrict the movement of TIH materials by rail around high-density population centers, without impeding the delivery of essential goods and services.
- Assessing the compliance with, and the effectiveness of, existing hazardous materials security plans as they specifically relate to TIH shipments by rail, and determining whether and how to amend the regulations of DOT's Research and Special Programs Administration (RSPA) that require those plans.

Over the longer term, DOT and DHS have established an interagency regulatory working group to review existing regulations and to do the following:

- Explore the potential risk reduction from making rail shipments of TIH materials less identifiable to terrorists, with careful consideration of the needs of first responders.
- Evaluate options for eliminating the use of rail tank cars for the temporary storage of TIH materials at user sites or rail yards in high-population areas, or improving the security surrounding these areas during temporary storage. If DOT and DHS determine that storage requirements may be warranted, we will develop additional rail yard protective measures for tanks cars used for temporary storage of TIH materials, and we will publish a notice in the *Federal Register* by August 1, 2004, requesting comments.
- Consider the feasibility and cost effectiveness of establishing minimum communication standards for transporters of TIH material, such as the real-time satellite tracking of railcars containing TIH material and the real-time monitoring of tank car conditions, as well as requiring intended recipients of TIH shipments to report non-delivery within agreed-upon delivery windows.

(b) Is it feasible to reroute some hazardous materials shipments?

Answer. The Nation's towns and cities were built on rail lines, and routing alternatives on the national rail system are very limited. Where routing alternatives do exist, making the route less direct would increase the cost and could also increase the safety risk for carriers and shippers. For example, some routes outside of cities may pose higher safety risks because the lines involved have low maximum operating speeds and are, therefore, subject to less robust track standards.

As I've discussed, our agency is participating in joint efforts with DHS and the Homeland Security Council to conduct a review and security risk assessment of rail shipments of certain hazardous materials (*i.e.,* TIH materials) through major metropolitan areas in order to better understand our potential vulnerabilities and to take protective actions. The risk assessment of these rail shipments in Washington, D.C., is currently underway. We hope that this effort will serve as a precursor and model for similar risk assessments in other metropolitan areas that have significant amounts of hazardous materials shipments.

Question 2. How has FRA modified its safety regulations since September 11, 2001 to improve rail security?

Answer. Since the September 11 attacks, FRA has used its rail safety rulemaking authority to pursue many rulemakings that benefit rail security, including several that are explicitly grounded on security concerns or that have clear security benefits. FRA has issued an interim final rule and a final rule requiring that trains operating in the United States be dispatched from the United States, except under certain limited conditions. The preamble to the final rule notes that current technology allows dispatching of domestic rail operations from anywhere in the world, including countries that may not offer the same levels of security and security measures that are offered by domestic agencies. We have also established a Railroad Safety Advisory Committee working group to use recent FRA-sponsored research to develop recommendations to improve FRA's Passenger Equipment Safety Standards and passenger train emergency preparedness standards. Further, we have progressed a rulemaking to establish performance standards for positive train control systems, which help prevent collisions and overspeed derailments, in both ordinary and security situations; a final rule is in clearance in the Executive Branch.

Finally, as I discussed in my prepared testimony, FRA and RSPA contemplated a rulemaking involving personnel security, but decided not to proceed after all. In coordination with DHS, which has the lead on transportation security, FRA and RSPA looked closely at the issue of whether the transportation of explosives by rail presented a sufficient security risk to warrant issuance of regulations concerning the backgrounds of railroad operating employees. Our analysis, jointly issued by the Transportation Security Administration (TSA), RSPA, and FRA and published in the *Federal Register* on June 9, 2003, indicated that railroad operating employees did not present a sufficient security risk requiring further regulation at that time because of the extensive regulation of the transportation of all hazardous materials, including explosives, by DOT; the protections inherent in rail operations against improper use of those materials by railroad employees; and the security safeguards already taken by the railroads themselves, including background checks. In that publication, we also noted, however, that the issue of whether to mandate background checks for railroad employees who transport hazardous material remains open.

> TSA is currently evaluating the need for and nature of background checks on transportation workers, in addition to those in the aviation and trucking industries, who are in a position to cause or control serious security-related events. TSA is taking a risk-based approach to security regulations so that the government and private sector can prioritize resources based on threat information, vulnerability assessments, and criticality determinations. TSA is engaged in such an analysis concerning background checks for transportation workers in the maritime and rail industries. TSA continues to evaluate the need for additional regulations concerning this population and potential threats, and may issue additional security requirements concerning railroad employees engaged in the transportation of [hazardous material].

68 Fed. Reg. 34474.

Question 3. Your written testimony states the many actions that have been taken by FRA and RSPA to safeguard the transportation of hazardous materials. But in light of the 2002 Minot, North Dakota derailment, in which one person died and 11 others were injured because 8 tank cars carrying anhydrous ammonia ruptured, doesn't more need to be done to improve tank car integrity? What should be done to phase out or rebuild older pressurized tank cars, like those in the Minot accident? The National Transportation Safety Board (NTSB) concluded that the type of steel used for the tank shells of the Minot cars contributed to the ruptures. Nearly 60 percent of the pressurized tank cars in service today were built using the same type of steel as the Minot cars. The NTSB indicated these cars could remain in service until 2039.

Answer. It is unlikely that all of the pressurized tank cars built before 1989 will be in use for TIH chemicals for another 35 years for economic reasons: the operating and maintenance costs of the vehicles begin to exceed the leasing revenues for tank

car owners after 25–30 years. Nevertheless, FRA will continue to explore whether retrofit or operating restrictions are needed for these cars.

For many years FRA and RSPA have been actively pursuing improvements in tank car structural integrity through the Association of American Railroads' (AAR) Tank Car Committee, of which the NTSB is a member, and we will continue to do so. Among the research items being investigated is a comprehensive analysis of the impact resistance of steels in the shells of pre-1989 pressurized tank cars, which must be completed before we can begin to assess and evaluate risk or to develop any necessary operating restrictions. When this initial study is finished, the results can be applied to design specific fracture toughness standards for tank cars built in the future. Furthermore, the most effective testing methods to replace the periodic retest requirement will need to be identified.

Overlying all of this effort is research into defining the operating environment for tank cars and the stresses they encounter in actual transportation. These efforts have been continuous since the mid-1990s and are looking at buff and draft forces, switching impacts, and forces developed during train accidents. FRA's Office of Research and Development is sponsoring an on-going program at the Volpe Center, the University of Illinois at Chicago, and Southwest Research Institute to evaluate in-train forces associated with train derailments. The development and validation of a model of such forces are expected to be complete in early 2006. Another research and development project being conducted jointly with the AAR and the tank car industry is the validation of previously developed data on the tank car operating environment to effectively determine the adequate service integrity of tank cars during their life. These programs are well on their way toward providing the agency with the necessary tools to better predict the action of such forces on tank cars in hazardous materials service.

Finally, as part of our new cooperative initiative with DHS, we are exploring the possibility of making tank cars that transport anhydrous ammonia and other TIH materials (TIH cars) better able to withstand deliberate attack. DOT and DHS have begun working with the AAR Tank Car Committee to evaluate options and methods for strengthening TIH cars against intentional assault, such as might be committed by a terrorist. Based upon a review of current intelligence, terrorist capabilities, feasibility, and cost effectiveness, DHS and DOT are working on a Design Basis Threat (a profile of the type, composition, and capabilities of an adversary), from which potential improvements in rail car design may be derived. DOT and DHS are also surveying technologies for strengthening TIH cars against terrorist attack, either through design modification or retrofit; any such strengthening would also help improve the crashworthiness of the TIH fleet. It is our hope that, by September 2004, we will publish a notice in the *Federal Register* requesting comments from the general public and the industry on options and methods for strengthening such cars against deliberate attack.

Question 4. In January 2003, I asked FRA and TSA to help Amtrak develop a security plan and a security *investment* plan. The plan FRA and TSA reviewed and provided comments on, however, was not Amtrak's final plan. You indicated at the time, Administrator Rutter, that FRA has hired Ensco, Inc., to review Amtrak's security plan and provide assistance in updating and revising it. Now I understand FRA has contracted with the RAND Corporation to review Amtrak's security programs.

(a) Has this review been completed and are you satisfied with Amtrak's plan?

Answer. FRA's reviews noted that current security investment decisions are often strategically and tactically ineffective. Expected completion of the review is December 2004.

(b) In your opinion, is Amtrak's current security-related funding request based on its security plan?

Answer. Amtrak's funding request is based on security recommendations from its police chief. To improve Amtrak's ability to identify and quantify its needs, FRA contracted with RAND to assist Amtrak in developing a program to fully identify risk and threat-based vulnerabilities.

(c) With all FTA is doing on transit security, did FRA think about having FTA review Amtrak's security plan?

Answer. Yes, but FTA handles transit and commuter railroads, not Amtrak. FRA regulates Amtrak, and as FRA Administrator, I sit on Amtrak's board. FRA thought it would be best to have an independent third-party contractor with extensive expertise in the security area to review Amtrak's security plan.

(d) Have these consultants been funded by Amtrak or FRA?

Answer. FRA initially funded the RAND study, but in order to gain more detailed information on operational security issues, the Amtrak Office of the Inspector General also provided funding for the RAND work.

(e) Has FRA provided other security-related financial assistance to Amtrak, and if so, how much funding and for what purposes?

Answer. In Fiscal Year 2002, FRA received an emergency supplemental appropriation of $105 million for Amtrak rail security as a result of 9/11. Of that amount, $100 million was for fire and life-safety improvements to Amtrak's New York tunnels, and $5 million was for overtime for Amtrak police and security personnel. To date, approximately $75 million of the $100 million for the tunnels has been obligated. Please note that FRA issues the general capital, Northeast Corridor capital, and operating grants for Amtrak, portions of which are used for security purposes.

Question 5. (a) What are the principal duties of FRA's Chief of Security?

Answer. FRA's Chief of Security spearheads FRA's efforts to assist TSA and the railroad industry implement practical measures to improve railroad security. He prepares procurement requests for, and provides technical management for, contracts to conduct security assessments. He coordinates railroad security issues and activities with the railroad industry and rail labor, with Federal, State, and local law enforcement, and with homeland security agencies. Working with DOT's Office of Intelligence and Security, DHS, and the railroad industry, he has established communication channels for rapid dissemination of threat information. Working with RSPA and our hazardous materials staff, he is developing guidance for evaluation of railroads' hazardous materials security plans. Working with FRA's regional staffs, he has helped plan and evaluate reviews of station security and plans for security enhancement in passenger rail facilities. As FRA and DHS clarify ongoing responsibilities for rail security, he may assume additional responsibilities for program management.

(b) How big a security force does FRA have?

Answer. FRA is currently authorized one Railroad Security Specialist (Risk Management) (the official title of the position held by FRA's Chief of Security, according to the position description). There is a broad overlap between FRA's historic rail safety responsibility and the new emerging rail security concerns. To date, FRA has been identifying and using existing resources to assure they address where possible both safety and security. Also, to a limited extent, FRA has been reprogramming existing resources to meet specific security needs (*e.g.,* using FRA safety inspectors to check the security-related plans and preparedness at Amtrak and commuter rail stations).

Question 6. How might the duties of FRA inspectors be changed to help fight terrorism? What role could they potentially play in prevention, emergency response training, and emergency response?

Answer. My prepared testimony indicates some of the ways that FRA's rail safety inspectors are supporting the effort to improve rail security. DHS is considering certain actions it may take in the future to enhance rail security, and FRA will work with it on reaching a specific agreement concerning how FRA inspectors may be able to assist DHS's initiatives.

RESPONSE TO WRITTEN QUESTIONS SUBMITTED BY HON. ERNEST F. HOLLINGS TO HON. ALLAN RUTTER

Question 1. a. How many FRA employees are dedicated to rail security at the FRA?

Answer. As I told Senator McCain in answer to his earlier question, FRA is currently authorized one Railroad Security Specialist (Risk Management), which is the official title of the position held by FRA's Chief of Security, according to the position description. There is a broad overlap between FRA's historic rail safety responsibility and the new emerging rail security concerns. To date, FRA has been identifying and using existing resources to assure that they address where possible both safety and security. Also, to a limited extent, FRA has been reprogramming existing resources to meet specific security needs (*e.g.,* using FRA safety inspectors to check the security-related plans and preparedness at Amtrak and commuter rail stations).

b. Do you see the FRA or the DHS as having a leadership role in this area?

Answer. Under applicable statutes, DHS is the lead Federal Government agency for railroad security. Section 101 of the Homeland Security Act of 2002 provides that the primary mission of DHS is to prevent terrorist attacks within the United States, reduce the vulnerability of the United States to terrorism, and minimize the damage and assist the recovery from terrorist attacks that do occur within the United

States. Section 114 of title 49, U.S. Code, vests in the Transportation Security Administration, which is now part of DHS, the responsibility for security in all modes of transportation, including railroads and mass transportation systems.

On December 17, 2003, the President issued Homeland Security Presidential Directive (HSPD) 7, which "establishes a national policy for Federal departments and agencies to identify and prioritize United States critical infrastructure and key resources and to protect them from terrorist attacks." *See* HSPD–7, Paragraph 1. In recognition of the lead role assigned to DHS for transportation security, and consistent with the applicable powers granted to TSA by the Aviation and Transportation Security Act, Pub. L. 107–71, 115 Stat. 597 (November 19, 2001), the directive provides that the roles and responsibilities of the Secretary of Homeland Security include coordinating protection activities for "transportation systems, including mass transit, aviation, maritime, ground/surface, and rail and pipeline systems." *See* HSPD–7, Paragraph 15. In furtherance of this coordination process, HSPD–7 provides that DHS and DOT will "collaborate on all matters relating to transportation security and transportation infrastructure protection." *See* HSPD–7, Paragraph 22(h).

While DHS plays the primary role in fostering rail security, FRA plays a supportive role. FRA contributes to this security effort, using the agency's broad delegated authority over "every area of railroad safety." The Administration's rail safety reauthorization bills transmitted to the Congress in July 2002 and July 2003 include a provision to clarify that the Secretary of Transportation's safety authority includes the authority to address threats to rail security. FRA believes that its current authority inherently includes security, but such a clarifying amendment would help FRA to preempt and quickly rebuff any judicial challenges to FRA safety rules and orders that are issued to enhance rail security, and any objections to FRA safety inspectors' examining vulnerability assessments and security plans of railroad carriers and railroad shippers in cooperation with DHS. A comparable clarifying provision was passed by the Senate in November 2003 (section 205(b) of the Federal Railroad Safety Improvement Act (S. 1402)).

c. Does the FRA budget contain funds specifically for rail security efforts? If not, how are current FRA rail security efforts being funded?

Answer. FRA was given funds for, and has hired, a rail security specialist. As I said earlier, FRA has been seeing to it that the agency's existing resources address both safety and security where possible and, occasionally, reprogramming existing resources to fulfill particular security needs.

Question 2. a. What are the various layers of security that are now deployed to protect rail and transit security?

Answer. The security measures currently in effect for railroads and transit systems may be divided into three categories: (1) measures to prevent security incidents through detection of security threats and deterrence of conduct that contributes to those threats; (2) measures to mitigate casualties through design; and (3) measures to mitigate casualties through emergency preparedness and hazard communication. My prepared testimony has dwelt quite a bit on casualty-mitigation measures, so I will focus now on preventive measures. These include (1) two-way threat-communication systems, (2) measures incorporated in the security plan of an individual railroad or transit system to address its identified vulnerabilities, (3) Federal oversight of the content and implementation of these security plans, and (4) special measures for U.S.-bound international cargo.

Two-Way Threat-Communication Systems

The Railway Alert Network (RAN) is a tool employed by FRA, under the direction of the Department of Transportation's (DOT) Office of Intelligence and Security, both to relay classified or sensitive information from intelligence and law enforcement sources to the railroad industry and to receive related threat information from the industry, all via secure communications. FRA and the railroad industry also use the RAN to exchange information on ways to address the specific threat. FRA, at no cost to the industry, provides the Association of American Railroads (AAR), railroad labor, the American Public Transportation Association (APTA), commuter railroads, and The American Short Line and Regional Railroad Association, with current information, threat assessments, and security bulletins. Designated FRA staff are available around the clock, seven days a week, to receive this vital information and to share it with senior DOT and FRA officials, railroad police, and national security agencies. Begun under a different name many years before 9/11, the RAN is currently funded jointly by DOT and AAR and is operated up to the Secret level. The RAN is now linked to the AAR's Operations Center and to another, more recently established threat-communication network, the Surface Transportation Information Sharing and Analysis Center (ST–ISAC).

DHS is the lead Federal agency for the ST–ISAC, which is run in partnership with both AAR and APTA and which serves the same users as the RAN as well as public transit agencies. DHS's Transportation Security Administration hosts the ST–ISAC personnel at the Transportation Security Coordination Center in Virginia. FRA, at no cost to the railroad industry, provides the ST–ISAC with current rail-related information, threat assessments, and security bulletins. The ST–ISAC operates up to the Top Secret level.

DOT also operates a Crisis Management Center to improve the dissemination of threat information throughout the Federal Government and the transportation industry as a whole. It is available 24/7 and is linked to the RAN and the ST–ISAC. The Crisis Management Center operates up to the Secret level.

Measures Incorporated in the Security Plan of an Individual Railroad or Transit System to Address its Identified Vulnerabilities

DHS's Information Analysis and Infrastructure Protection Directorate, the Federal Transit Administration (FTA), and FRA have jointly conducted comprehensive security vulnerability assessments of rail and transit systems in high-density urban areas. FTA funded these studies for the 50 largest transit agencies in the United States, which include the ten biggest commuter railroads, railroads subject to FRA's safety authority. FRA participated in each of the vulnerability assessments for these ten commuter railroads and helped to fund three of the ten assessments. These vulnerability assessments identified where resources should be directed now and in the future.

Currently, security measures intended to prevent security incidents by addressing these vulnerabilities vary with the individual transit system or railroad. FTA Deputy Administrator Jamison can provide details on transit systems not within FRA's jurisdiction. The commuter railroads' security measures include the following:

- monitoring by uniformed and plain-clothes police;
- use of closed-circuit television for surveillance;
- security sweeps of terminals and trains;
- use of bomb-sniffing dogs to detect explosives;
- efforts to prevent unauthorized access to train platforms, rail yards, and passenger car maintenance and cleaning facilities;
- notices and job briefings of employees on how to be more aware of suspicious persons and packages;
- public announcements or printed notices to passengers to warn them to be alert for such persons and packages and to notify railroad personnel directly or through communication systems located in trains or in stations; and
- special training of security personnel.

Amtrak's security measures are similar and described in some detail in its prepared testimony. I might also note with regard to training efforts that FRA has developed and made available a terrorism-awareness training program to educate railroad employees, local law enforcement, first responders, and railroad and shipper security managers. This education process provides insight into terrorist organizations, tactics, and planning, surveillance techniques, and attack protocols (*i.e.,* ways a terrorist might attack a person and what the person should look for, *e.g.,* someone wearing an overcoat in Washington, D.C., on July 4).

As for preventive measures in the security plans of freight railroads, the AAR's testimony outlines the security plan adopted by the AAR Board of Directors for its member freight railroads. That security plan establishes four security alert levels and describes the actions to be taken at each level. At Alert Level 1, when there is "a general threat of possible terrorist activity[,]" 32 actions are to be taken, both to prevent incidents and mitigate casualties. Preventive measures include security education, limiting access to certain information to those with a need to know, curbing the unauthorized tracing of certain materials, and regularly verifying that security systems are working properly. At Alert Level 2, "when there is a general nonspecific threat of possible terrorist activity involving railroad personnel or facilities[,]" 21 more preventive or casualty-mitigation actions are to be taken. The additional preventive actions include discussing security and awareness during each day with employees; making "content inspections of cars and containers for cause;" making "spot content inspections of motor vehicles on railroad property; and increasing security at designated facilities." Currently, the freight railroad industry is at Alert Level 2, and has undertaken some additional preventive measures in various urban areas as advised by DHS. Further security actions are prescribed in the

AAR plan for Alert Levels 3 and 4. The same alert levels are used by the shortline railroads.

Federal Oversight of the Content and Implementation of these Security Plans

Federal monitoring of railroads' security plans is another layer of security. DHS has primary responsibility for reviewing and overseeing these security plans. FRA uses its inspectors to monitor implementation of security measures in response to elevated threats. Soon after the Madrid bombings on March 11, 2004, in coordination with DHS, I instructed FRA's regional offices to undertake multi-day team inspections of Amtrak and each of the 18 commuter railroads to see what additional security measures had been put in place. Almost 200 FRA safety inspectors participated in this project. When they found security problems, they alerted senior railroad managers so that the problems could be remedied. Finally,, for railroads that carry hazardous materials, RSPA's regulations require security plans and security training for their employees who handle hazardous material. Railroads must adhere to those plans and update them to meet new situations. We are looking forward to assisting RSPA and DHS in checking how the railroads are putting these plans into action.

Special Security Measures for U.S.-Bound International Cargo

Finally, for railroads that handle international, intermodal freight, DHS's Container Security Initiative provides important additional security protections at the Nation's land and sea borders. That initiative involves four core elements: (1) identifying high-risk containers in foreign countries before the containers are loaded onto vessels destined for the United States; (2) pre-screening those containers before shipment; (3) using detection technology, such as radiation detectors and large-scale X-ray-type imaging equipment; and (4) using tamper-evident containers so that U.S. Customs and Border Protection officers can determine whether the cargo has been tampered with after it was screened overseas.

FRA has continued to increase its railroad inspections at the borders, and continues close coordination with U.S. Customs and Immigration authorities. FRA coordinated the optimum placement of X-ray machines at railroad border crossings with U.S. Customs, and FRA is helping Customs' efforts to have trains inspected in Canada before being granted access to the United States.

b. Who bears the cost of these security measures?

Answer. The costs of existing security measures are borne by the Federal, State, and local governments and by the private sector. Some security measures, such as the RAN, are funded by the Federal Government and the AAR. Other security projects, such as vulnerability assessments for the 50 largest transit agencies, and many of Amtrak's security efforts are paid for by the Federal Government.

c. How do our layers compare to those deployed by other countries?

Answer. In almost all cases for countries on the European continent, railroads are owned, and often even operated by, the government of the country. Therefore, security measures to protect railroads are planned for, and provided by, one or more government security agencies. For example, in France, protection of the SNCF railroad's assets and operations is provided by the French National Police, as well as the French military, not by the SNCF railroad. A security liaison function within the SNCF closely works with these government assets. Security liaison staff at the railroads usually is made up of former government security members or, as is the case in Germany, is from the intelligence community. In addition, the International Rail Association (French acronym, "UIC"), headquartered in Paris, helps coordinate European rail security operational aspects, and FRA, as an associate member of the UIC, since 9/11 actively participates in this rail security policy-planning and policy-making effort and disseminates available information to relevant U.S. rail and transit entities.

In the United Kingdom, local and national police, including Scotland Yard for major incidents, assist the privatized rail industry with security issues. In the case of Japan, the privatized major railroads have their own security forces, and they closely work with various national and local security forces. China's huge government-owned and -operated railroad has a considerable Railways Police force, with wide ranging powers, including meting out capital punishment, and an extensive prison system. Russia's equally huge rail system is being restructured, and we assume that security will continue to be provided by a mix of railroad police and Russian military. The Russian government continues to consider the rail system as a "national monopoly," and security is tightly and centrally controlled in Moscow at a separate, high security command center.

d. What is the annual spending by country for implementing these layers?

Answer. FRA does not have this information. Because security is more often than not provided by either a foreign country's military or its other national assets, information on spending for protection programs is impossible for FRA to ascertain or obtain.

Question 3. What percentage of the DHS/TSA budget is dedicated to rail/transit security and how is that money used?

Answer. FRA respectfully defers to DHS to answer that question.

Question 4. How much research funding is being spent each year, and for future years?

Answer. For Fiscal Year 2004 (FY 04), FRA's Office of Research and Development (OR&D) has several ongoing and planned security initiatives, some of which I've described in my prepared testimony. Those initiatives, along with their respective funding amounts for FY 04, are as follows:

(a) OR&D plans to spend about $200,000 in FY 04 to assess the vulnerabilities of passenger cars by evaluating the results of a passenger car explosion.

(b) FRA OR&D also plans to provide $200,000 in FY 04 to assist the TSA with a railroad Passenger Check-Point Screening Pilot Program.

(c) The Tank Car Security Evaluation is an ongoing project with a total funding amount of $400,000 from FY 03. This cooperative project with DHS evaluates the integrity of tank cars through the detection of tank car breach utilizing sensors on the tank cars.

(d) The Passenger Car Manifest Study is an ongoing initiative prompted by a National Transportation Safety Board recommendation. The total funding amount of $225,000 was provided in FY 03, and no FY 04 funding is required. Currently the study is being performed to define one or more options for a real-time manifest system for Amtrak trains.

(e) The Transportation Security Situation Display (TSSD) has been funded at a total amount of $125,000, which was provided in FY 03, and no FY 04 funding is required. The TSSD is a developmental activity involving DOT's Volpe National Transportation Systems Center and others. The TSSD is intended to help first responders to allocate their resources by providing on a computer monitor a visually displayed map of a localized area where there is a security situation, a natural disaster, or a weather-related disruption.

For FY 05, FRA OR&D has requested $400,000 to continue the study initiated in FY 04 for passenger car explosion testing. Work will also be initiated on bridge and tunnel security monitoring.

RESPONSE TO WRITTEN QUESTION SUBMITTED BY HON. FRANK R. LAUTENBERG TO HON. ALLAN RUTTER

Question. Why has the Administration not requested any funding specifically for Amtrak rail security?

Answer. Again, DHS is the Federal Government's lead agency on transportation security. FRA defers to DHS on how to deal with the security needs of Amtrak. FRA has been working closely with DHS and Amtrak to define security investment priorities, and I expect that in the future these will be represented in specific security-related resource requests. My answers to some of Senator McCain's earlier questions on Amtrak security provide further explanation.

RESPONSE TO WRITTEN QUESTIONS SUBMITTED BY HON. JOHN MCCAIN TO PETER F. GUERRERO

Question 1. What are the various layers of security that are now deployed to protect rail and transit security? Who bears the cost of these security measures? How do our layers compare to those deployed by other countries? What is the annual spending by country for implementing these layers?

Answer. Passenger and freight rail stakeholders have taken a number of steps to improve the security of the Nation's rail system since September 11, 2001. Although security received attention before September 11, the terrorist attacks elevated the importance and urgency of transportation security for passenger and freight rail providers. Consequently, passenger and freight rail providers have implemented a number of new security measures or increased the frequency or intensity of existing activities, including performing risk assessments, conducting emergency drills, and developing security plans. The Federal Government has also acted to enhance rail

security. For example, the Federal Transit Administration has provided grants for emergency drills and conducted security assessments at the largest transit agencies, among other things.

The costs of security enhancements have been borne by rail and transit providers and all levels of the government. For example, the Department of Homeland Security provided about $115 million to transit systems for security enhancements, such as physical barricades, video surveillance systems, and integrated communications systems, in Fiscal Years 2003 and 2004. In addition, the transit industry has invested $1.7 billion in security enhancements since September 11, according to the American Public Transportation Association. Funding needed security enhancements is a challenge for both passenger and freight rail systems. Although some security improvements are inexpensive, such as removing trash cans from subway platforms, most require substantial funding. The current economic environment makes this a difficult time for private industry or the government to make additional security investments. Given the tight budget environment, rail providers must make difficult trade-offs between security investments and other needs, such as service expansion and equipment upgrades.

At the request of several Members of Congress, including Members of the Senate Committee on Commerce, Science, and Transportation, we are beginning a review of passenger rail security that will examine the security practices of our Nation's passenger rail systems and compare them with the practices of systems in select foreign countries. In particular, we plan to (1) identify vulnerability assessments of U.S. passenger rail systems that have been done and examine the results of these assessments, (2) identify measures that are currently in place or planned to screen rail passengers and their baggage and identify the limitations of these measures in securing the rail systems, and (3) examine passenger rail security measures that select foreign countries employ and determine the feasibility of applying these measures domestically. To the extent possible, we will also examine the costs of passenger and baggage screening measures in the United States and select foreign countries. We expect to complete this review next year.

Question 2. What percentage of the DHS/TSA budget is dedicated to rail/transit security and how is that money used? How much research funding is being spent each year, and for future years?

Answer. As part of our passenger rail security review, we will examine Federal spending on rail security activities. We expect to complete this review next year.

In addition to our review of passenger rail security, we also are currently examining the Federal Government's research and development efforts for all modes of transportation, including rail, at the request of several Senate and House committees. In particular, we are examining (1) the extent to which DHS/TSA has managed its transportation security R&D program according to applicable laws; (2) the extent to which DHS/TSA resources are committed to research and development across all transportation modes and to next generation technologies, systems, and equipment; and (3) the nature and scope of DHS/TSA coordination of its research and development program with other government and private sector organizations. We expect to complete this review in August 2004.

RESPONSE TO WRITTEN QUESTIONS SUBMITTED BY HON. JOHN MCCAIN TO JACK RILEY

Question 1. Do you think there is any way the Madrid attack could have been avoided? If so, how?

Answer. Given the size, yet simplicity, of the Madrid attacks (10 backpack bombs detonated near simultaneously), it is unlikely that the event could have been completely averted by any combination of rail security measures. Passenger and employee awareness programs might have reduced the number of successful detonations. Explosive-sniffing dogs might have caught a few more. The only measures that could have prevented the attack in its entirety are intelligence and surveillance that resulted in preemption of the attack.

Question 2. Your written testimony states "There is a need for coordinated Federal policy on rail security, encompassing freight, passenger and commuter rails. Compared to other transportation sectors, decision-making appears to be quite decentralized between a number of federal, state, local and private concerns." Based on everything you have heard today, do you think we have a well-coordinated rail security program?

Answer. While there has been a substantial amount of rail security activity (even prior to the Madrid attacks), it is not particularly well-coordinated. For example, the freight industry has moved rapidly, but they are motivated by a desire to avoid reg-

ulation. TSA is the logical locus of that coordination, so that tradeoffs between rail and air and maritime, or between passenger and freight security. However, TSA has yet to emerge as the focal point. Thus, while there is a clear focal point for airport and airline security best practices, there is not for rail. This is the primary reason that I think rail security is not well-coordinated.

Question 3. Mr. Riley, given your company's extensive work on security, what do you believe are the three most important steps to take to secure the Nation's rail system?

Answer. In the short run, the best steps for passenger rail: visible security measures (patrols, cameras, explosive sniffing dogs, etc) as a deterrent; passenger awareness campaigns; employee awareness campaigns; and blast resistant containers. Beyond these short run efforts, I do not believe the analytic work has been done (see 4–5 below) to justify other, large expenditures. For example, I do not believe we have the basis for justifying passenger screening programs.

For freight security, the best immediate steps are slightly different: employee awareness campaigns and visible (and effective) efforts to secure cargo that can be weaponized. Beyond these short run efforts, I do not believe the analytic work has been done (see 4–5 below) to justify other, large expenditures. It is also important to note that a large fraction of freight rail cargo originates at U.S. ports. Thus, to the extent that we succeed in securing the ocean container supply chain we will also be improving the security of the freight rail system.

In terms of infrastructure security (*i.e.,* tunnels, bridges, tracks, etc.), I think most of the emphasis will need to be on mitigation. Do tunnels have adequate ventilation? Are there escape routes? Do we have alternatives to key bridges? Questions like these are necessary in the event that we do not succeed in preventing attacks.

Last, but not least, as mentioned in "1" above, the issue of intelligence and surveillance is an important one.

Question 4. Since we cannot protect everything, how should decisions be made about how much to spend on rail security and what our priorities should be?

Answer. The first priority should be understanding, through simulation, surveys, interviews, and other methods, what the potential catastrophic rail attack events are. For example, how easily could tunnels be breached by explosions? What characteristics might future attacks have? Thus, we need to formally review the types of attacks that might occur and assess where they might do the most damage. Second, we need to map these vulnerabilities to the likelihood of attack (that is, to the threat). We are most interested in identifying events that are high(er) likelihood and high consequence.

Question 5. How can Congress evaluate the costs and benefits of rail security measures in an objective way?

Answer. Spending decisions on rail security need to be made in the context of other security needs, particularly in the context of security for other critical infrastructure. To accomplish this, we need a national threat assessment and the vulnerability analysis from (4) above for rail and other critical infrastructure. Only then can we begin to make informed decisions about how much we should spend on rail security relative to spending on other infrastructure security.

RESPONSE TO WRITTEN QUESTIONS SUBMITTED BY HON. JOHN MCCAIN TO HON. EDWARD R. HAMBERGER

Question 1. What has happened to the insurance market for the freight railroads since September 11, 2001? Have the railroads been able to obtain terrorism insurance?

Answer. While certainly the commercial insurance market was turned upside down from the tragic events of Sept. 11, and the impact on the availability and affordability of various lines of insurance continue to exist, the impact to the freight railroads depends on the line of coverage. For the most part, under the general liability lines, the freight railroads have been able to secure comparable coverage, including coverage for acts of terrorism, albeit with significant increases in premiums.

While general liability coverage is still relatively available in the commercial marketplace, property damage coverage is difficult to secure; and where such cover is even offered in the commercial markets, the terms and conditions are severely restrictive and the costs are essentially prohibitive. In most cases the freight railroads have gone outside of the commercial marketplace and have instead utilized the coverage created by the Federal Terrorism Risk Insurance Act of 2002 (TRIA) for property damage. The railroads pay premiums for the TRIA coverage through captive insurance companies.

The railroads are pleased to be able to obtain this coverage for property damage and urge that TRIA be extended beyond its current expiration date in 2005. However, it should also be noted that TRIA insurance has yet to be used. As a result, uncertainties remain as to the full cost of participation in the event of a terrorist act against another party, the process for determining when coverage will be triggered by the Secretary of the Treasury, and the timing of and process of any insurance payments by the fund. Also, TRIA coverage only applies to an international, and not domestic, terrorist act. These issues should be considered during the debate over TRIA's extension.

Question 2. Your written statement indicates that under the rail industry's security plan, at the highest level of alert (when there has been a confirmed threat against the rail industry or a terrorist attack has occurred), the railroads would stop "all non-mission-essential contract services with access to critical facilities and systems." What exactly are "non-mission-essential contract services"?

Answer. Examples of "non-mission-essential contract services with access to critical facilities and systems" that the railroads would stop at the highest alert level are:

- Janitorial service
- Vending machine service
- Newspaper deliveries
- Food deliveries
- IT and communications contract services such as maintenance and deliveries

Question 3. Under what conditions does the railroads' plan call for rerouting hazardous materials?

Answer. The Terrorism Risk Analysis and Security Management Plan ("Plan") implemented by the railroad industry addresses the security of hazardous materials transport in many ways. Depending on the alert level, railroads impose increasingly stringent security measures to protect these shipments. This security management approach provides a proper balance between the need for increased security and the need to meet delivery requirements for critical commodities. The Plan provides for rerouting as an option that can be considered in very limited circumstances and for periods of short duration so as to avoid serious disruption to the operations of certain rail customers, such as water treatment facilities and pharmaceutical manufacturers.

Question 4. Your written testimony states that "Tank cars must meet stringent U.S. DOT specifications if used to transport hazardous materials." But in light of the Minot, North Dakota accident, in which one person died and 11 others were injured because 8 tank cars carrying anhydrous ammonia ruptured in a derailment, doesn't more need to be done to improve tank car integrity?

What can/should be done to phase out or rebuild older pressurized tank cars, like those in the Minot accident? The National Transportation Safety Board (NTSB) concluded that the type of steel used for the tank shells of the Minot cars contributed to the ruptures. Nearly 60 percent of the pressurized tank cars in service today were built using the same type of steel as the Minot cars. The NTSB indicated these cars could remain in service until 2039.

Answer. The tank car issue is about steelmaking techniques, including a thermal process called normalization, and how steels fail when overstressed. It appears that NTSB is asking FRA to prioritize hazardous materials that are transported in 32,818 non normalized cars today so that the most hazardous and most likely to be subject to rupture in cold temperatures can be moved into normalized steel cars, while allowing the non normalized cars to be used for less hazardous materials. While the railroads are nor the owners of these tank cars, they are able, through the AAR Tank Car Committee, to influence tank car design, research, and utilization. The committee is already looking at the issues raised by NTSB in their recommendations to FRA, and we will cooperate with FRA and others to accomplish improvements in tank car safety. Many improvements have been made to tank cars over the years as a resu1t of research initiated and paid for by the rail industry (including the railroads and the tank car builders & lessors/owners) through the RSI–AAR Tank Car Safety Research and Test Project NTSB and the regulators need to be cognizant, however. that This cooperative approach could be jeopardized if government action would make cars obsolete for marginal benefits, As information, the current pressure car fleet is comprised of 60,849 cars, 32,818 of which were constructed prior to 1989.

Question 5. What has been the cost to the rail industry to modify your track and facilities to accommodate screening technology at our borders with Mexico and Can-

ada? What additional expenditures do you estimate will be incurred in implementing the technology at additional border crossings?

Answer. Following 9/11, Customs changed its enforcement strategy to include the deployment of Rail VACIS (Vehicle and Cargo Inspection System) at the southwest and northern border rail crossings. A rail VACIS uses gamma ray technology to scan each rail car as the train slowly (1–8 mph) moves past the VACIS equipment, which remains stationary. The full image of the vehicle and its contents are produced at a nearby console, which is operated by a trained inspector. From the X-ray image, inspectors can find unidentified articles and hidden compartments within the rail car.

Railroad Vehicle and Cargo Inspection System (VACIS)

According to the Department of Homeland Security, U.S. Customs has deployed seven out of eight southwest border rail VACIS systems which are expected to cover 100 percent of the southwest border rail traffic.[1] The 8th system is expected to be installed by the end of 2004. U.S. Customs is planning to place nine rail VACIS systems on the northern border, which are expected to cover 90 percent of northern border rail volume entering the United States from Canada.[2]

Canadian National and Canadian Pacific Railroad have signed agreements with both the Canadian and U.S. customs agencies concerning VACIS. The railways will build the facilities, but U.S. Customs will purchase, install and maintain the equipment at Sarnia, ON; Windsor, ON; Buffalo, NY; Champlain/Rouses Point, NY; Noyes, MN; International Falls/Rainier, MN and Portal, ND.

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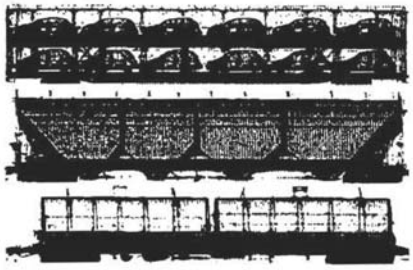
[1] Among the U.S.-Mexico railroad crossings are San Diego, CA; Calexico, CA; Nogales, AZ; El Paso, TX; Eagle Pass, TX; Laredo, TX (Seranno Yard), Brownsville, TX. At Laredo, a new rail cargo inspections facility, completed in April 2003, was built on land owned by Union Pacific.

[2] There are 9 U.S.-Canadian border crossings with VACIS: (7) facilities on U.S. soil at International Falls/Rainier, MN; Portal, ND; Buffalo, NY; Blaine, WA; Noyes, MN; Champlain/Rouses Point, NY and Eastport, ID and (2) facilities on Canadian soil at Sarnia, Ontario (Sarnia Yard) and Windsor, Ontario (Walkerville Yard). Not all locations are up and running.

While U.S. Customs has funded the purchase of the VACIS machinery through DHS's FY 2002 and 2003 appropriations, the freight rail industry is assuming costs to accommodate this screening technology. These include expenditures such as the use of right of way, track, signaling, buildings, pads and toplifters. The biggest expenses are creating and locating physical infrastructures that meet Customs security standards for any cars that need to be set out of the train for a resulting intensive exam, including the cost to switch out the rail car or intermodal unit. Work is also usually required on railroad property to position the VACIS machine itself. Costs among the Class 1 railroads vary significantly. Some railroads have reported minimal direct costs, while in one case expenditures are expected to reach $8 million.

View of Railroad VACIS

View of VACIS-screened carloads



Actual Railroad VACIS scans of rail car transport, grain hopper and covered gondola

An additional cost is the requirement to operate at a maximum speed of 6 MPH. While some technology improvements may soon allow speeds up to 8 MPH, that is still less than half the speed that railroads would normally operate at the border without VACIS speed restrictions. Reduced speed not only impedes productivity, it also results in blocking road crossings for longer that necessary at all gateways.

Question 6. The freight railroads have identified a need for $15 million in federal assistance to continue technical research into protective measures and emergency response protocols. What specific projects should be funded?

Answer. The projects contemplated in the $15 million figure are a continuation of a joint rail industry/DHS/FRA effort. The projects are designed to develop security enhancements for the transportation of hazardous materials and tools for emergency responders. Extensive testing already has been accomplished and additional funding is needed for the next phase. Due to the sensitive nature of these projects, they should not be discussed in a public forum. My staff and I would be happy to meet with the committee in a closed session should additional detail be required.

RESPONSE TO WRITTEN QUESTIONS SUBMITTED BY HON. ERNEST F. HOLLINGS TO HON. EDWARD R. HAMBERGER

Question 1. Do you believe that intelligence information is being appropriately coordinated among various Federal agencies and then directed to appropriate private and public sector officials? How is information passed on to first responders?

Answer. There is considerable room for improvement in the way government shares information among agencies and with industry. Because approximately 85 percent of all critical infrastructure is owned by the private sector, government should treat industry as full partners in the intelligence cycle. All barriers to including industry in the analytical stage through early warning must be removed immediately in order to protect critical infrastructure and services against terrorist attacks.

AAR does not have any information as to how government communicates intelligence information to first responders.

Question 2. What types of technologies are available (*e.g.,* portal screening systems/identification systems/facial recognition) to screen passengers and baggage in rail or transit situations?

What is the feasibility and potential cost for the United States to implement these efforts at high risk or otherwise appropriate Amtrak and commuter rail facilities or services in this country?

Answer. AAR is not familiar with passenger screening technologies. Amtrak and/or the Transportation Security Administration may be able to provide this information.

RESPONSE TO WRITTEN QUESTION SUBMITTED BY HON. FRANK R. LAUTENBERG TO HON. EDWARD R. HAMBERGER

Question. Many Class I railroads employ railroad police. Outside of law enforcement and security activities, what activities do these rail police perform for railroads?

Answer. In addition to their law enforcement and security activities, railroad police officers perform such other functions as they may be assigned and for which their professional training has qualified them.

These functions include a wide range of duties. For instance, railroad police act to promote public safety at accident scenes, at grade crossings with malfunctioning warning devices, and in the community. Railroad police enforce company policies (including policies prohibiting the possession of alcohol and firearms). Railroad police conduct lawful investigations when criminal wrongdoing is suspected. And railroad police observe and report safety violations—a responsibility that all senior rail officials share.

In short, railroad police undertake those functions that are necessary to ensure the safety, security, and integrity of each railroad, consistent with their sworn obligation to uphold the law and to act within the limits of statutory authority and corporate governance.

RESPONSE TO WRITTEN QUESTIONS SUBMITTED BY HON. JOHN MCCAIN TO WILLIAM W. MILLAR

Question 1. Given that transit systems are intentionally open systems for easy and convenient access, what can reasonably be done to protect transit systems from terrorism?

Answer. Americans should be able to use public transit in the U.S. without fearing for their safety and security. In that regard, and within the confines of limited budgets, public transportation systems have been engaged in a number of activities to enhance safety and security. These include security operational activities, including security awareness training for employees, public outreach programs and drills. Transit systems have also been improving their radio communications systems, surveillance systems and limiting and securing access points to transit facilities and equipment.

Nonetheless, much more needs to be done. In a recent transit security survey, APTA members identified $6 billion in unmet transit security needs. While, public transit agencies have already spent $1.7 billion on transit security out of their own budgets, the Federal Government has only provided $115 million in Federal grant funding for transit security since September 11, 2001. We believe that significantly more Federal resources should be made available to make our transit systems as safe and secure as possible.

Question 2. Given limited Federal resources, what should our highest priorities be for funding?

Answer. The public transportation industry has identified security priorities through a survey recently conducted by APTA. Priorities for capital needs include improved inter-operable radio and other communications systems, strengthening access control to facilities, establishing emergency operations control centers, and a variety of other capital improvements that would enhance security. Priorities for security related operating costs include threat assessments, enhanced planning, public awareness, training, drills, and reimbursement for transit security police for overtime expenses as a result of heightened Federal alerts.

Question 3. How effective has the Information Sharing and Analysis Center (ISAC) been in effectively communicating intelligence about terrorist activities?

Answer. APTA is sector coordinator for the Public Transportation ISAC. The ISAC is an effective means of communicating intelligence about terrorist activities. Approximately 197 public transportation systems are receiving daily security reports through e-mails that provide critical alerts and advisories. Among its 197 members are membership organizations, including the Community Transportation Association

of America which represents numerous small urban and rural transit agencies. The ISAC provides a secure two-way 24/7 reporting and analysis structure that links the transit industry to the U.S. DOT, the TSA, the DHS and other government agencies. The Public Transportation ISAC is a member of the 13 member ISAC Council, which provides valuable interaction among the other established critical infrastructure sectors, such as finance, energy, information technology and telecommunications.

Question 4. In its 2003 review of FTA's security initiatives, GAO recommended that legislation be passed to allow transit agencies to use Federal urbanized area formula funds for security-related operating expenses. What is FTA's position?

Answer. To the best of our knowledge, the FTA has not established a position on this particular GAO recommendation.

RESPONSE TO WRITTEN QUESTIONS SUBMITTED BY HON. ERNEST F. HOLLINGS TO WILLIAM W. MILLAR

Question 1. Do you believe that intelligence information is being appropriately coordinated among various Federal agencies and then directed to appropriate private and public sector officials?

Answer. Consistent with Presidential Decision Directive—#63, APTA has established the Public Transit Information Sharing Analysis Center (ISAC) that enables communication of security intelligence information to transit systems on a 24-hour/7 day a week basis. The Public Transit-ISAC is linked with DHS, TSA, FBI and several other intelligence sources. Over the past six months within DHS's Directorate of Information Analysis & Infrastructure Protection has taken steps to develop stronger coordination ties with the various ISAC's.

Question 1a. How is information passed on to first responders?

Answer. Public transit is actually regarded as a first responder. We utilize the Public Transit ISAC to transmit information.

Question 2. What types of technologies are available (*e.g.,* portal screening systems/identification systems/facial recognition) to screen passengers and baggage in rail or transit situations?

Answer. While transit agencies do not have adequate funding to fully embrace technological applications, there are a number of technologies that transit systems are using regarding security. These technologies include: CCTV, intrusion detection, GPS, Smart-Card identification for employees and contractors, emergency intercoms on rail cars and station platforms, public address systems, chemical agent detection, and inter-operable radio communication. There is no practical, cost effective technology currently available for passenger screening in the public transit environment.

Question 2a. What is the feasibility and potential cost for the United States to implement these efforts at high risk or otherwise appropriate Amtrak and commuter rail facilities or services in this country?

Answer. Given the large numbers of passengers using public transit every weekday, the feasibility of introducing portal screening, etc., for commuter rail and rail transit systems other than on a random basis does not appear to be realistic at this time.

RESPONSE TO WRITTEN QUESTIONS SUBMITTED BY HON. JOHN MCCAIN TO JOHN O'CONNOR

Question 1. More than a year ago, I asked TSA and FRA to work with Amtrak to develop both a security plan and a security investment plan. Both agencies provided comments on an investment plan that Amtrak's President David Gunn informed me was not Amtrak's final security plan. With security such a high priority, why hasn't Amtrak submitted a final funding plan until today?

Answer. The plan submitted pursuant to your hearing cannot be viewed as a *final* security plan. While it addresses Amtrak's known and obvious vulnerabilities and threats, it attempts to mitigate these threats.

The submitted plan called for operating costs, which would be recurring (more police and security officers).

In addition, many of these initiatives require funding. As has been well documented, Amtrak has had to stabilize the Corporation and railroad system along with increasing security. The former was, and still is, the highest priority. With stabilization occurring (contingent upon sufficient Federal funding), Amtrak is addressing security issues in a more substantive manner. The recently released five year

capital plan contains numerous security projects and demonstrates Amtrak's commitment to improving security.

Question 2. Have FRA and TSA given Amtrak comments on this final plan, including the cost estimates for the various projects?

Answer. FRA representatives attend all Amtrak Board of Directors meetings and are intimately aware of our needs and proposals regarding security. Amtrak received a written response from TSA in May of 2003. TSA could not provide funding, but indicated general support of the security plan. The TSA response is enclosed.

Amtrak is working with the RAND Corporation following their review of security and a recommendation to conduct a systemwide vulnerability assessment. The findings and recommendations from this vulnerability assessment and compliance with the TSA security directives will drive Amtrak's security funding plan.

Question 3. How does Amtrak coordinate its security efforts with Metro-North, the Long Island Railroad, and MTA in New York City?

Answer. It must be pointed out that overall management of NYPS is complex and an interagency effort. Through agreement, there is an established Penn Station Control Center (PSCC) where agencies work side-by-side, interacting and coordinating train operations on a daily basis. A part of this overall endeavor is the Penn Station Security Committee (PSSC) in which law enforcement personnel coordinate and handle PSNY security issues. In addition, there is regular communication between these law enforcement agencies.

There is also a Fire and Life Safety Committee that addresses safety and emergency response issues. Also, a modern multi-agency command center is activated in Penn Station. In the event of a security or life safety emergency, first responders manage incidents through the incident command system.

Question 4. FRA Administrator Rutter testified that FRA recently hired the RAND Corporation to review "Amtrak's security posture and current programs, focusing on the adequacy of preparedness for combating terrorist threats". What is the status of this review and what effect might it have on the funding request you have made today?

Answer. The RAND report has been communicated to senior Amtrak officials. Amtrak has already taken steps to address recommendations contained in the report. However, a primary recommendation of the report is that Amtrak should commission to have a systemwide vulnerability assessment conducted. Amtrak continues to work with RAND in the development of the format for this type of assessment in a national passenger rail system and is expected to have a product available shortly. It has also committed FY'05 funds to have this study completed as soon as possible. It can reasonably be anticipated that additional funding requests can stem from the findings and recommendations of this vulnerability study.

The results of the vulnerability assessment and compliance with the TSA security directives will drive Amtrak's funding plan.

Question 5. The National Transportation Safety Board (NTSB) has criticized Amtrak for its inability to provide passenger car manifests. When Amtrak's Auto Train derailed on April 18, 2002, near Crescent City, Florida, Amtrak told the NTSB incident commander there were 468 people on the train. "The day after the accident, Amtrak gave the incident commander a computer printout list, which contained information that did not match either of the two lists provided on April 18. In fact, Amtrak never provided the incident commander an accurate count of the persons on board the train." The actual passenger count was ultimately determined to be fewer passengers than indicated by Amtrak.

What is Amtrak doing to address this situation? I can understand the difficulty in providing manifest information for some trains, but the Auto Train does not make station stops between the train's origin and destination.

Answer. We continue to look for realistic ways of improving our ability to maintain accurate passenger counts on our long distance, overnight, and reserved trains. We currently employ procedures on all long distance reserved trains, which periodically undergo refinement (*see* e.g. Chapter 16, Part D of the Service Standards Reference Manual for Management Employees). We continue to study realistic operational and technological methods to enhance the efficiency of recording ticketed and non-ticketed passengers. We have communicated with both the TSA and the FRA and have pledged our cooperation with them in their efforts to address this area. And, Amtrak has invited any practical solutions that the NTSB may have that specifically accommodate all of the variables involved. While not offering any solutions, the NTSB has, pending Amtrak's study of methods to enhance passenger and crew accountability, classified Crescent City Safety Recommendation R–03–10, dealing with passenger accountability as "Open-Acceptable Response."

And, to avoid the type of confusion that ensued after Crescent City, we have suggested to the NTSB that future on-site inquiries concerning passengers and crew be directed to the conductor, or a person representing him/her in the event of his/her unavailability. After the initial count is provided, the senior Amtrak representative on site will designate one Amtrak representative to be the single point person concerning the number of passengers and crewmembers.

The system now in place on the Auto Train has undergone several refinements since the Crescent City derailment. Currently, all passengers are met upon arriving at the Sanford or Lorton stations to determine their ticketing status and the number of people traveling corresponding to a particular automobile. The ticket agent at the booth checks the tickets and assigns the automobile a loading number. Those passengers who are not ticketed but who appear on the loading manifest are sent to the ticket office to pick up tickets and/or pay for them. All passengers are then instructed to pull up to unload and turn over their automobiles for boarding and to go to the ticket office and check in with either coach or sleeper accommodations. At that time, the passengers are given boarding passes and the agents reconcile this information with the computerized manifest list. Should any upgrades be required, this is also handled at the ticket office.

All passengers are given boarding passes and collection of the tickets is handled at the ticket office. The passengers are placed on a boarding car diagram by which car and accommodation location they are sitting, for coach or sleeper. This places them in their proper location for the trip. All data for all passengers traveling on the train is entered into Amtrak's database.

RESPONSE TO WRITTEN QUESTIONS SUBMITTED BY HON. ERNEST F. HOLLINGS TO JOHN O'CONNOR

Question 1a. Do you believe that intelligence information is (sic) being appropriately coordinated among various Federal agencies and then directed to appropriate private and public sector officials?

Answer. This matter is difficult to answer. For the most part, an entity like Amtrak will not be aware of the actual coordination efforts among Federal agencies. However the level of coordination efforts that include Amtrak has risen significantly in the past few years.

The Amtrak Police and Security Department, through its senior management level officials, has established strong working relationships with various Federal agencies. Most notably, Amtrak has regular contact and exchanges with the DHS and TSA. The Amtrak Police Department provides information to the Transportation Security Operations Center (TSOC) in Herndon, VA and works closely with high-level officials in TSA's Maritime and Land Security Branch. As information, the Amtrak Police Department received 152 intelligence reports from 52 different sources over a five days span after the Madrid bombings. 85 were "Law Enforcement Sensitive", 50 were "For Official Use Only", 15 were "Open Source" and 2 were "Classified Briefings". Although Amtrak would desire intelligence information in a more-timely manner, overall it would classify its relationship with Federal agencies as strong.

Also, Amtrak works closely with its industry counterparts in coordinating and disseminating intelligence information. It works with the Surface Transportation—Infrastructure Security Advisory Center (ST–ISAC) and the Rail Alert Network (RAN), a part of the AAR. Further, the Amtrak Police Department works closely with the industry law enforcement representative assigned to the FBI's National Joint Terrorism Task Force (NJTTF).

Finally, the Amtrak Police Department has personnel dedicated to intelligence related functions. A management official is assigned to Criminal and Terrorist Intelligence, an investigator is assigned to the FBI Joint Terrorism Task Force in New York, and an administrative officer provides intelligence gathering support and analysis as well as coordinating development and enhancement of the Corporation's Industrial Security Clearance Program.

Question 1b. How is information passed on to first responders?

Answer. The Amtrak Police Department provides security information and appropriate intelligence information updates to its sworn police personnel directly through Special or General Order announcements, roll call, or through a Security Alert.

Question 2a. What types of technologies are available (*e.g.,* portal screening systems/identification systems/facial recognition) to screen passengers and baggage in rail or transit situations?

Answer. For your convenience, I have attached the TSA powerpoint presentation identifying the equipment used during the recent TRIP pilot initiative at New Carrollton Station, MD. This may be more beneficial to answer your question.

Question 2b. What is the feasibility and potential cost for the United States to implement these efforts at high risk or otherwise appropriate Amtrak and commuter rail facilities or services in this country?

Answer. TSA estimated that its costs for personnel and equipment for the New Carrollton, MD less than 30 day TRIP initiative was $1.3 Million. The Amtrak Police Department spent $16,755 over this period. This was one of the smaller low passenger volume stations in the Amtrak route system. To extrapolate this to encompass the entire national passenger rail and commuter systems would be difficult and speculative. However, the costs would be unwieldy and enormous in all likelihood.

Amtrak would defer further response to the DHS and TSA on the costs of a national screening system.

RESPONSE TO WRITTEN QUESTIONS SUBMITTED BY HON. JOHN D. ROCKEFELLER IV TO JOHN O'CONNOR

Question 1. We all know that Amtrak is hurting financially. We also know you have to target your limited resources. My guess is that most of your security efforts focus on the East Coast and perhaps West Coast corridors. How much have you spent on security overall, and what is the breakdown on funding for areas other than the East and West Coasts?

Answer. FY03 provides the latest full-year actual spending results and can be broken down into the following regions:

	(Millions)		
Region	FY03 Actual	FY03 Budget	FY04 Budget
1East	$26.2	$25.5	$26.9
Beech Grove/New Orleans/Ft. Worth	1.0	1.0	1.0
Chicago	1.9	1.8	1.9
West	1.7	1.7	2.0
Total	$30.8	$30.0	$31.8

In addition to the operating budget, capital funded projects over the past two years are listed below:

Security Fencing—$1.3 million/annual (5 year program)

Electronic Message Boards—$0.4 million

Emergency Notification System—$0.1 million

Access Control System Improvements—$0.1 million

Los Angeles Yard Security Improvements (assessment)—$0.5 million

National Communications Center Technology Improvements—$0.1 million

In response to your inquiry on increased security costs post 9/11, note that three work element numbers had been established over a period of time to cover increased security costs.

1. 976407—Established immediately after 9/11. Police along with Engineering charged $11.9M during a period covering Sept. 2001 to Nov. 2002.
2. 976477—Picked up where 976407 left off although there is some overlapping. Charged $489k from May 2002 to June 2002 and then picked up again in March 2004 thru July 2004.
3. 976494—Totals $1.4M from Sept. 2002 to June 2004 and again, some overlapping with 976477.

Operating budgets post 9/11 are as follows:

Year	Budget	Headcount
FY02	$26.9M	412
FY03	30.0M	423
FY04	31.8M	435

The FY03 Capital Program consisted of 4 projects totaling $2.4M:

1. Security Fencing
2. Electronic Message Boards
3. Emergency Notification System
4. Employee ID Cards (cancelled mid-year)

The FY04 Capital Program* consisted of 7 projects totaling $1.7M:

1. Electronic Message Boards (continued from FY03)
2. Emergency Notification System (continued from FY03)
3. Access Control System Improvements
4. NCC Technology Improvements
5. Automatic External Defibrillators
6. Firearms Simulation System
7. Police Vehicle Equipment Replacement

* Security Fencing continued in FY04 as an Engineering Department initiative.

ATTACHMENT

Transit and Rail Inspection Pilot

Phase II- Screening of Checked Baggage at Union Station, DC

Transportation Security Administration

1

Objective

Determine the operational suitability of commercially available and emerging screening technology for screening of checked baggage in the rail environment.

- Assist in developing a screening model for Amtrak at one of its busiest stations;
- Review laws and issues related to screening of checked baggage; and
- Consider ways to maintain effectiveness while increasing public acceptance.

Transportation Security Administration

2

Threat Scenario

Large amount of explosives carried on board an AMTRAK train that causes significant loss of life and damage to multi-use rail infrastructure.

Transportation Security Administration

3

Scope Limitations

- Baggage screening technologies limited to Commercial Off-the-Shelf Technology that can be inserted into Washington Union Station without physical plant and infrastructure modifications.

Transportation Security Administration

4

Approach

- **Development of requirements and technology assessments**
  - Phase II: Evaluate equipment, processes, and procedures for screening of checked baggage and/or parcels in the rail environment
    - Washington Union Station
    - Develop report of findings and model on a large scale basis
- **Incorporate TSA K-9 team with Amtrak K-9 teams for explosive detection**

Transportation Security Administration

5

Transit and Rail Inspection
Pilot Phase II Funding

- Phase II: $300K
- Distribution of Funding:
  - Engineering work - $150K
    - TSA may be responsible for electricity used during Phase II
  - Site survey and modeling - $100K
  - Screeners - $100K

Transportation Security Administration

6

Phase II Screener Resources

- TSA Manager (TSA HQ)
- Screener Supervisor (1)
- Lead Screener (1)
- Automated X-Ray for Explosives Detection (1 Screener)
- Tabletop Resolution/ Baggage Handlers (7 Screeners or less)

- **Total Screener Resources (10 Screeners Needed)**

Transportation Security Administration

7

Concept of Operations – Phase II

- **Large amounts of explosives**
  - Checked baggage for Amtrak long-distance trains (inter-city service offering checked baggage) originating at Washington Union Station
  - Unclaimed baggage
  - Temporary storage of personal items
  - Drop-off cargo
- **Screening Periods**
  - 9:00 AM to 5:30 PM, M-F
- **Amtrak Boardings – Union Station, DC**
  - Daily Average Number of Trains - 5
  - Daily Average Number of Checked Baggage - 200

Transportation Security Administration

8

Current Vulnerabilities

- Checked Baggage
- Unclaimed Baggage
- Temporary Storage of Personal Items
- Drop-off Cargo

Transportation Security Administration

9

Baggage Processing

- Passengers check baggage when purchasing ticket
- If ticket is pre-purchased, passenger may still drop off checked baggage at ticket counter
- Baggage carried away from ticket counter via conveyor belt

Transportation Security Administration

10

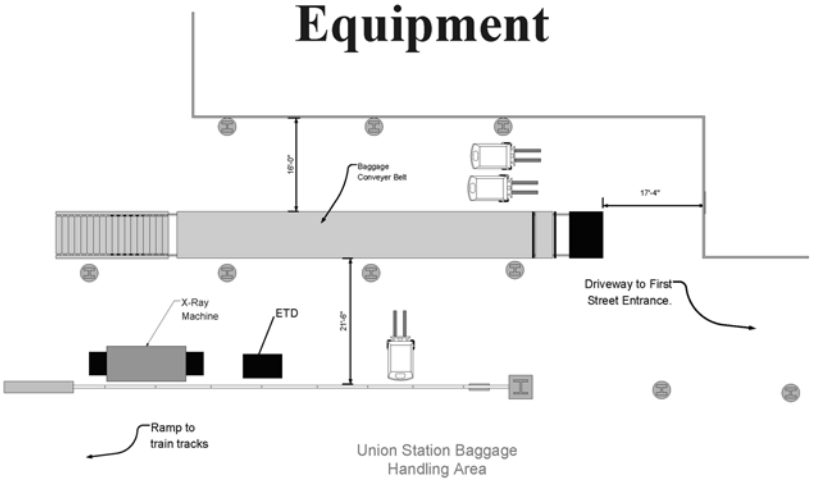
Baggage Processing – Con't

- Checked baggage continues down conveyor belt to processing center
- Baggage is placed on x-ray machine and screened
- Baggage is sorted and placed on cart identified with train on which passenger will travel
- Cart remains in processing center until time to load on correct train
- Cart is unloaded onto train

Transportation Security Administration

11

Proposed Layout of Screening Equipment



Union Station Baggage Handling Area

Transportation Security Administration

12

Checked Baggage Screening Equipment -
Smiths Heimann EDS HI-SCAN 10080

- Combines both physical signatures "Z effective" (atomic number) and density which allows the EDS to offer the highest detection rate in its class.
- Throughput - able to screen up to 1,800 bags per hour.

Transportation Security Administration

13

Electronic Trace Detection with Smiths Ionscan 400B (Secondary Screening)

- Utilized successfully during TRIP Phase I.
- Detects and identifies trace amounts of more than 40 explosive substances in a quick 8 second analysis.
- Challenged and evaluated in U.S. federal and state courts and has passed the Frye and Dow judicial standards. The IONSCAN® has never been defeated in court.

Transportation Security Administration

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Unclaimed Baggage

- Any baggage not claimed is secured in the station
- A customer may claim baggage with ID match
- Baggage remains locked up for up to 48 hours
- Unclaimed baggage will be screened using K-9 or ETD

Transportation Security Administration

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Temporary Storage of Personal Items

- Patrons at Union Station can drop off baggage for daily storage
- Baggage can be stored for any period of time
- Patron given claim check when leave bag
- Claim check is matched to baggage when patron returns to claim baggage
- Average of 100 bags per day
- Personal items will be screened using K-9 or ETD

Transportation Security Administration

16

Drop-off Cargo

- Amtrak accepts cargo for transport on passenger trains
- Cargo is carried directly to cart identified with train traveling to intended destination
- For Phase II, cargo will be screened prior to loading on train by K-9, EDS, or ETD.

Transportation Security Administration

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Success Metrics

- Screen 100% of checked baggage during the designated screening periods;
- Screen 100% of left baggage during the designated screening period;
- Screen 100% of unclaimed baggage at Union Station;
- Screen cargo on a to-be-determined schedule using EDS/ETD/ K-9 as appropriate during designated screening period;
- Successfully resolve all alarms;
- Determine operational effectiveness of processes, procedures, and technologies (i.e. “how well”);
- Determine reliability, maintainability, and availability of technologies used during pilot.

Transportation Security Administration

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Phase II Issues

- Public Affairs/Legislative Roll-out
- Cargo
- Application of Aviation Locked Baggage Protocols to Pilot Project
- Use of On-Screen Alarm Resolution Protocols
  - Adaptability for Equipment
  - Training of Screeners

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Phase II Timeline

- June 4/7 – 30, 2004 (Pilot Project Period)
- July 7, 2004 – Data Analysis, "Quick Look" report completed
- July 20, 2004 – Final Report

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